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ABSTRACT

Hoping to clarify partially some of the questions relating to talent development, occupational allocation, adaptability of workers, training of workers, worker satisfactions and performance, a search of related literature was conducted by dividing the material into five major categories: (1) technology, (2) organizaticnal structure, (3) intrapersonal factors, (4) environmental factors, and (5) interpersonal factors. The results of this study are intended for: (1) classifying employment opportunities as a basis for prescribing compatible jobs for different types of people, (2) classifying the behavior required for survival and success in various job settings, (3) identifying and classifying the variables now operating in educational and resocializing institutions, and (4) specifying models for social systems in training centers. Four related documents are available as VT 011 591-011 595 in this issue. (Author/JS)

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WORK ORGANIZATION BEHAVIOUR AND ATTITUDES

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WORK ORGANIZATIONS, BEHAVIOUR AND ATTITUDES

Joseph C. Ryant

Second Edition

A STUDY BY THE
INDUSTRIAL RELATIONS CENTRE
MCGILL UNIVERSITY

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FOREWORD

This publication is one of a series prepared under contract by the Industrial Relations Centre of McGill University for the Department of Manpower and Immigration's Experimental Projects Branch which was transferred to the Social and Human Analysis Branch of the Department of Regional Economic Expansion in July 1968.

The study includes a detailed review of the literature. It also provides a list of major organizational variables which social scientists have identified as affecting success and performance, and an analysis of how the variables affect behaviour. Suggestions are made about the provision of a theoretical abstraction of the variables to make them applicable in diverse organizational contexts.

The results of the study are intended for:

1. Classifying employment opportunities as a basis for prescribing compatible jobs for different types of people
2. Classifying the behaviour required for survival and success in various job settings
3. Identifying and classifying the variables now operating in educational and resocializing institutions
4. Specifying models for social systems in training centres.

The study was expected to clarify partially some questions relating to talent development, occupational allocation, adaptability of workers, training of workers, worker satisfactions and performance.

Dr. W.A. Westley of the Industrial Relations Centre, McGill University, directed the study. He was assisted by research assistants under whose authorship their individual reports are published.

Mr. J.M. Saulnier of the Experimental Projects Branch was responsible for the administration of the contract and the preparation of the material for printing. He was assisted by Mrs. C. MacLean.

WORK ORGANIZATIONS, BEHAVIOUR AND ATTITUDES

INTRODUCTION

In order to adequately assess those features of work organizations which have been demonstrated to affect work behaviour, work attitudes, and levels of work performance, some order must be imposed upon the multitude of factors which have been tested as possibly causative. That this is necessary is a quite obvious consequence of the diverse theoretical and empirical approaches to the phenomena in question. Any review of the literature on the subject, especially when it purports to be eclectic in its orientation, has to take into account the fact that the dependent variables of interest are linked to independent and contingent variables which represent different units of analysis and which describe causal chains of varying length and complexity. What in one study is an independent variable - for example, supervisory style - is in another study a variable itself dependent on either managerial ideology, or capital investment per worker, or managerial perceptions of the motivation of its work force, etc. To adequately assess the effects of variations in supervisory style upon work performance, work attitudes, and general behaviour in the work place, one has therefore to cover the full range of the possible causal linkage.

The method we have adopted is to roughly divide the material into five major categories, all of which have been found not only to be related to the dependent variables of interest but to each other as well. While there

is a certain "rough and ready" character about this division - still being quite far from theoretical purity - and while the classification of some of the material under one heading rather than another is woefully tentative in its theoretical certainty, the advantage sought is twofold: first, to take account of all the significant determinants of work-related behaviour, and second to attempt to establish the validity of an argument for temporal sequences in an admittedly complex and multi-factored causal chain.

The five major categories into which the material has been divided are as follows: technology, organizational structure, intra-personal factors, environmental factors, and interpersonal factors. Within each category, the relevant variables will be treated as independent sources of variation in work behaviour and work-related attitudes. It is hoped that the reader will develop a sense of cumulative contribution to an understanding of the phenomena of concern. While the coverage is far from complete, the literature reviewed is thought to exemplify the more important lines of reasoning within each category.

I TECHNOLOGY

A great deal of attention has been paid to the dehumanizing and alienating effects of modern work, particularly as it results from the inherent characteristics of machine age employment - large scale operations employing many workers in one unit, noise, dirt, mechanical pacing of work, etc. We shall review this literature, but in addition, we shall examine some

of the other effects that are thought to be determined by technological factors. Let us begin with questions related to alienation.

As applied to work, the concern with alienation began with Marx. In his review of Marx's treatment of the subject, Bell (1962, pp.355-392) tells us of the changes which occurred in the relative emphasis placed on the two elements originally considered by Marx. The young Marx saw alienation emanating from two factors - the dehumanization attendant on mechanization and technological aspects of large-scale industrialism, and the exploitation involved in the expropriation from the workers of the fruits of their own labour. As Marx's work became more programmatic, it was the second aspect of the concept that was emphasized with little subsequent attention paid to the inherent alienating features of work technology. Despite this neglect in Marx's later work, the history of industrialism since that time has tended to keep consideration of this question continually salient.

Much of what has been written on the subject is assertive and programmatic. A great deal of it emerges from comparisons of the conditions of workers in modern times with philosophically based conceptions of the inherent nature of man (hence, the term "dehumanization"). However, some material is more closely tied to describing effects as perceived and as felt by the participants themselves, without making assumptions about man's inner nature. It is this latter set of studies that will concern us here.

Before doing so, we should perhaps specify some of the dimensions of possible differentiation in technology.

TYPOLOGIES OF TECHNOLOGICAL DIFFERENTIATION

Dubin (1958, pp.64-65), for example, makes six possible distinctions all of which are thought to be related to the prestige-ranking of the workers involved. These are handwork vs. brainwork, skilled work vs. routine work, creative work vs. routine work, work for which the worker has individual responsibility vs. work in which the jobs are standardized and predetermined, complex work vs. simple work, and finally, work which requires a long learning period vs. work which can be learned in a very short period.

Other authors look at work in terms of the raw materials which are used, the types of operations performed on them, and the nature of the final product produced. The most general distinction of this type is the one used by Pearlin and Kohn (1966), among others, to distinguish between jobs which deal principally with things, ideas, or people. Perrow (1967) makes a much more detailed distinction primarily on the basis of the perceived nature of the raw materials involved and their variability. He adds that work can also be differentiated according to whether or not the required technologies necessitate few or frequent exceptions to the established procedures, and as to whether these exceptions are dealt with in a routine or non-routine manner.

Another dimension in terms of which productive work has been differentiated deals with the extent to which and the manner in which the work

process has been fragmented and subdivided. Dubin (1958) calls this the difference between specialized and subdivided work, the former dealing with integral units of the final product; the latter confined to component bits and pieces of the total process. The many authors who deal with assembly-line work tend to treat it as the ultimate example of subdivision of work into fractioned operations. Work of the former character tends to be labelled as either professional, skilled, or craft work.

This latter distinction leads in turn to yet finer distinctions about the nature of work. Questions of freedom from close supervision, and of discretion about how, and at what pace, the work shall be performed are more usually thought to be related to the intrinsic nature of the technological process than to any other factor.

The question of specialization (as against sub-division) relates to yet another important dimension of technological differentiation. It appears that this distinction underlies the technical terms on which worker interdependency depends. Whether the integration of combined effort is achieved by internalized standards and interpersonal relations (whether formally prescribed or informally evolved) or by building the integrative procedures into the productive process itself through machine methods and machine linkages often appears to be a question of whether or not the particular work tasks involved are specialized or subdivided. Stinchecombe (1957) speaks of the integration of work as achieved by the internalized work standards of a craft, failing which bureaucratic controls are needed.

Blauner (1964), who has pursued the early Marxian treatment of alienation as embedded in work technology, and who has extended the concept, distinguishes between work technologies which are intrinsically conducive to worker feelings of powerlessness, meaninglessness, isolation, and self-estrangement, and those which provide him with control, purpose, integration, and self-esteem. To do this, he divides productive work into craft, assembly-line, machine-tending, and continuous process technologies, a distinction - it should be noted - which encompasses and summarizes many of the differences already listed above.

Blauner's exposition of the relationships between technology and alienation is so detailed that we must, for the sake of brevity, find an adequate way to summarize his findings. Basically, he is describing the effects inherent in four types of technology.

1. A craft industry has a technology which is neither highly mechanized nor extremely subdivided. Its units of work tend to be integral and whole. It relies on a high degree of skill and experience on the part of the workman, and it requires the constant application of worker judgement as to the manner in which the work task is to be performed. Expertise is thought to be a function of experience rather than of hierarchical rank.

2. An assembly-line industry has a technology which has built its design, the extreme subdivision of the total work process, so that large groups of workers perform fragmented sets of operations upon the final product as it moves by them, in a predetermined sequence. Work pace is determined by the speed of the conveyor belt carrying the product to and by

the workers. Since each worker performs but a few operations, designed in advance to be as simple as possible, lower levels of skill and experience are required. Expertise is less a function of experience than of hierarchy.

3. A machine-tending industry is one with a technology which has machines performing the basic work operations, often in a semi-automatic manner. The sequences of work are predetermined by design, but the process tends to be discontinuous in the sense that the machines at any one stage of the process are not automatically linked to the machines which immediately precede and follow their particular operations. Workers are primarily responsible for monitoring the machines for continuous operation, ensuring no temporary delays due to interrupted input of raw material, snarls in mechanism, mechanical breakdown, etc., and for the transfer of the output at one stage of the process to new machines which require these products as their input. As in the case of assembly-line work, skill levels are low except for those workers involved in repair and maintenance work. The difficulty of the work is a function of the number of machines having to be attended.

4. A continuous process industry is one which combines certain features of both the assembly-line and machine-tending technologies. Like the assembly-line, the sequence of work steps is continuous, each stage of the operation being linked to those before and after. Like machine-tending, the basic operations are performed not by workers but the machinery itself. However, the controls are not completely automatic so that workers are required to monitor dials and gauges which report the progress of the raw material through the stages of the process, and which allow the workers to correct and adjust the work process by means of valve-turning, button-pushing, and switch-flicking. The necessary skills are judgemental and discriminatory, as was the case in the craft industry, but the work operations themselves require neither manual dexterity nor the skilled manipulation of tools and equipment.

There are, no doubt, many other distinctions that one could introduce to characterize the variety of work technologies which exist. We have dealt with some of the major sources of variation, and now, we can proceed with tracing some of the existent connections between technology and other factors.

ALIENATION AND TECHNOLOGY

Simone Weil (1962), who had spent some time working in an automobile plant on the assembly-line, was one of the first to speak of the alienating consequences of modern technology. Particularly critical of the subdivision of work into meaningless segments, she also decried the mechanical pacing of the work which stripped the worker of control of his own organism. Piecework, a mode of payment which can be used only in a highly rationalized work process, was found by Weil to be another alienating feature of the experience. While her remarks are based on her impressions of the effects of the experience on her fellow workers, Weil foretells what later, more systematic and less impressionistic studies will reveal.

Walker and Guest (1952), in a highly-regarded study based on interviews with workers in the American automobile industry, reported that assembly-line workers were resentful about certain features of their work. Especially upsetting was the mechanical pacing by the speed of the line, the very small fraction of their work by the repetitive performance of but a few simple operations. The authors reported that dissatisfaction varied inversely with the number of operations each line worker had to perform, and directly

with the opportunity to exercise autonomy over the pace of work and to exchange jobs.

Crozier (1964,pp.76-77), describes workers' reactions to the introduction of semi-automatic equipment into a tobacco factory in which hand operations had previously prevailed. These workers complained bitterly about being "reduced to the condition of robots, human machines, mechanical animals". It appeared to Crozier that the complaints related more to psychological tension than to physical pain or exhaustion.

Kornhauser and Reid (1965), in another study of automobile factories, examine the mental health states of the workers. They find that a statistically significant number of the workers in the most routine and repetitive jobs, that is, in assembly-line jobs, reveal symptoms of poor psychological health. The authors, having controlled for prior education and for pre-job conditions, relate this finding to the intrinsic nature of the jobs themselves. They conclude that it is therefore legitimate to speak of "healthy and unhealthy" jobs, and that assembly-line work is clearly the latter.

Blauner (1964) finds that assembly-line workers are clearly most alienated on each of the four dimensions of alienation which he considers. (Machine tenders were not far behind.) The work technology renders them powerless in the sense that they have little control over the pace of the work, and no discretion as to how it is to be done. The extreme subdivision of the

total productive process induces meaninglessness since it is perceived as unrelated to the totality of the final product. The layout of the plant floor, dictated as it is by the requirements of the belt, necessitates relative isolation from sustained contact with other workers. Finally, the inability to derive satisfaction from work brings about an estrangement from the work self.

Blauner goes beyond some of the direct connections between work technology and worker reactions, and points out how the assembly-line technology is associated with other factors which are themselves determinate of alienation, dissatisfaction, and insecurity. He finds, for example, that assembly-line technologies utilize a low skill distribution of labour, in the sense that there is a disproportionate number of semi-skilled and unskilled workers required. The same is true of highly rationalized machine-tending technologies. Inkeles (1960) and Inkeles and Bauer (1961) have demonstrated that dissatisfaction with one's type of work appears to vary inversely with skill level so that, by extrapolation, we can see how some technologies are more productive of dissatisfaction than others. We must, however, be extremely cautious about the absolute extent to which workers, even at low levels of skill, are dissatisfied. Skill levels appear to be associated with the relative differences in reported satisfaction, but there are often such great differences in absolute magnitude that factors other than technology must also be involved. Data presented by Inkeles and Bauer (1961,p.104)

illustrate the difficulty in attributing too much causation to technology alone. Why, for example, are 76% of American semi-skilled workers satisfied whereas only 45% of the workers at the same skill level are satisfied in the USSR sample. The difference for unskilled workers in the two samples is of even greater magnitude. The conclusion appears inescapable that, whatever the technology, US workers tend to evidence higher degree of of satisfaction.

As Blauner reports it, another characteristic of the assembly-line technology is that, as long as the work process is in operation, every work station must be manned. Therefore, the alternative responses to varying market conditions tend to be either production with full labour force or shutdown with massive lay-offs for certain periods of time. As a result, assembly-line workers are shown by Blauner to be among the highest in the average number of workers laid off per month and close to the lowest among the proportion of wage and salary workers who worked fifty or more weeks per year (1964,p.197). It is therefore not surprising that the automobile industry has almost double the unemployment rate of all manufacturing industries in the four year period examined by Blauner (p.198). That work technology can therefore have strong connections to worker feelings of security or insecurity appears to be an inescapable conclusion. Blauner cites evidence that automobile workers rank close to the bottom of the list of workers by industry in feeling that their jobs are steady (p.199), at the top of the list in the proportion of workers expecting a lay-off (p.199), and next to the bottom of the list of workers optimistic about security or retirement (p.209).

We may look at a summary of some of Blauner's findings. However, we must keep in mind that the data used is not of unquestioned value since it was gathered more than ten years before Blauner's secondary analysis, and since the period in question saw great changes and developments take place in the technological conditions of many industries. We must also note that in the tables which follow, the differences between percentages represent all the factory workers in a given industry, not only those who follow its characteristic technology.

TABLE 1

THE FOUR TECHNOLOGIES ON DETERMINANTS OF WORKER INSECURITY

Determinant	Craft	Machine-Tending	Assembly-Line	Continuous Process
% of workers working 50 or more weeks per year (Table 27)	77.8%	68.1%	57.4%	72.2%
Lay-off rates (Table 28)	0.9	1.5	3.6	0.8
Unemployment rates (Table 29)	3.8	7.2	13.4	3.7
Amount of Education required % of workers who have completed high school (Table 44)	70.0	29.0	40.0	40.0

TABLE 2 THE FOUR TECHNOLOGIES ON WORKER REPORTS OF INSECURITY

Worker Report	Craft	Machine-Tending	Assembly-Line	Continuous Process
% of workers reporting they can have their job as long as they want it (Table 31)	92.0%	84.0%	73.0%	94.0%
% of workers reporting they expect to be laid off (Table 32)	3.0	14.0	29.0	2.0
% of workers reporting optimism about security in retirement (Table 52)	58.0	43.0	33.0	63.0

TABLE 3

THE FOUR TECHNOLOGIES ON PHYSICAL CONDITIONS OF THE WORK

Item	Craft	Machine-Tending	Assembly-Line	Continuous Process
% of workers feeling that they have to work too fast (Table 33)	11.0%	32.0%	33.0%	12.0%
% of workers feeling that their work makes them too tired (Table 34)	12.0	38.0	34.0	19.0
% of workers stating that they can leave work station without replacement for 30 minutes (Table 36)[1]	81.0	49.0	50.0	58.0

[1]It should be noted that this finding runs counter to the usual depiction of the assembly-line technology tying the workers to the moving belt. The described differences between the conditions of work in the assembly-line and the continuous-process technology are not at all reflected by the response pattern to this item. Blauner points out that the survey covered all workers in a given industry, that is, all factory workers in the automobile industry not merely those on the assembly-line, and that the response pattern may be accounted for by the conditions of work for the non-line employees. This, however, was true on all the items, and Blauner cannot have it both ways, ignoring the mixed sample when the distributions favour his thesis, and citing its heterogeneous character when the distribution runs the wrong way.

TABLE 4

THE FOUR TECHNOLOGIES ON THE DISTRIBUTION OF SKILLS

Skill Distribution (Table 26)	Craft	Machine-Tending	Assembly-Line	Continuous Process
% of skilled workers and foremen	70.0%	12.0%	29.0%	30.0%
% of semi-skilled workers	26.0	82.0	64.0	52.0
% of unskilled workers	3.0	6.0	7.0	18.0

TABLE 5

THE FOUR TECHNOLOGIES

ON WORKER REPORTS OF INVOLVEMENT IN THEIR WORK

Item	Craft	Machine-Tending	Assembly-Line	Continuous Process
% of workers stating that their jobs are too simple (Table 43)	16.0%	23.0%	35.0%	21.0%
% of workers stating that their jobs are always or mostly dull (Table 42)	4.0	10.0	34.0	11.0
% of workers stating that they can think of non-work things while working (Table 41)	27.0	54.0	37.0	36.0
% of workers stating they can try out their own ideas while at work (Table 35)	79.0	38.0	47.0	64.0

These data certainly support Blauner's contention that increasing mechanization and routinization, up to the point that the work becomes automated, causes increasing alienation and dissatisfaction. At the point of automation, since skill levels are once again raised, since the work is no longer fragmented, and since discretion and judgement are once again required, alienated responses decrease and worker satisfaction is thought to rise. Inferentially, this conclusion is supported by Foote (1959) and by Vollmer and Mills (1966). Each study examines the "professionalizing" effects on the labour force of the introduction of automation finding that the automated workers tend to have a specialized technique supported by a body of theory, a career supported by an association of colleagues, a status supported by community recognition, and, in the case of the nuclear workers studied by Vollmer and Mills, a special community status related to their responsibility for community health and welfare. Since each of these elements is, on a priori grounds, thought to be rewarding, the conclusion follows that automated technologies are associated with low alienation and high satisfaction.

Faunce and Clelland (1967) compare the labour force distributions of a one-industry city in which the industry is automated with the average distribution for all cities of 10,000 - 50,000. They conclude, as did Foote, and Vollmer and Mills, that automation does tend to professionalize the labour force and to upgrade skills.

In their sample city, the number of professional and technical workers had increased at three times the rate of increase in all other cities compared, the number of managers and officials had increased whereas the overall distribution for all cities of like size had decreased, the number of operatives had decreased four times more than in other cities, and there was a 50% greater decrease in the number of labourers.

It is interesting in this connection that Blauner's data on skill distribution neither support this picture nor the conclusions which he himself draws from them. His data (Table 26,p.196) show that the assembly-line-technology, automobile industry had proportionately as many skilled craftsmen and foremen, more semi-skilled workers, and far fewer unskilled workers than the continuous-process-technology, chemical industry. Despite this, Blauner characterizes the chemical industry as one with balanced skills and the automobile industry as one with a low-skill distribution.

Two reports on the effects of the introduction of automation conflict with the rosy picture presented by Foote, Vollmer and Mills, Faunce and Clelland, and Blauner. In a field study of workers in a newly automated automobile plant, Faunce (1958) finds that these workers were more, rather than less, dissatisfied. The high capital investment in the new equipment, and the consequently greater cost of shutdown, made the foremen exceptionally sensitive to the risk of breakdown. As a result, workers were more closely supervised than they had been previous to the new technology. Indeed,

whereas, on the assembly-line, the foremen had tended to play roles of assistance, they now rather stringently directed their workers. Although the plant layout placed workers in definite social groupings, as distinct from the strung-out work stations on the line, the amount of social inter-action between workers was actually reduced. Faunce suggests that this was a result of the closer attention to the work required of the workers, the greater distances between them, and the greater noise of the automated machines. He concludes that under the technological conditions established in this plant, prescriptions about human relations-oriented supervisory techniques were much less relevant than recognition of the intrinsic features of the technology in use.

Hoos (1960) studies the introduction of automated equipment into the white collar clerical world, and concludes that the costs, in terms of work satisfaction and morale, are high. At the clerical level many jobs disappear, not so much in the sense that the work force is reduced appreciably but rather in that output increases without concomitant increases in the size of the labour force. Those new manual functions which are created tend to be more monotonous and uninteresting than those they replaced, and skill levels tend to be depressed. Moreover, the introduction of this equipment tends to reverse the tendency to decentralization of plants and offices, thus necessitating many inter-city transfers, again, a cause of dissatisfaction. At the managerial level, many middle-management jobs dealing with

coordination and scheduling disappeared, with concomitant reductions in the number of middle managers. This heightened the insecurity of those remaining, and closed mobility avenues for many of those below this level. As a consequence of her study, Hoos' conclusions about the benign effects of the introduction of automation tend to be pessimistic.

Blau and Scott (1962, pp.180-188) review some of the other evidence on automation, and make the following conclusion:

> ... as long as automation is not accompanied by a higher level of skill on the part of the workers involved, it does not result in increased discretion for them; hence, job satisfaction is not notably improved by such automation and may in fact be reduced. Given a low level of skill of operators, moreover, the complexity of the machines and the interdependence of operators appear to require closer supervision and greater centralization of decision-making to minimize the costly delays occasioned by machine breakdowns or by imperfect coordination (p.182).

We must therefore differentiate the instances where automation depresses the required skill levels from those which elevate the skill level. It would also appear that more negative consequences stem from the use of the old labour force instead of using workers already accustomed to the new technology (we limit ourselves only to the negative effects on satisfaction). New industries, starting with automation as their only technology, may have an advantage in this respect over older industries which

transform their customary technology. Finally, we should be aware that most of the negative results tend to have been found shortly after the introduction of the new technology, and that the studies cited did not take care to distinguish between the effects of change itself and the particular type of change involved. There is considerable evidence that suggests that it is the mere factor of the change, quite apart from the nature, which operates as a determinant of worker satisfaction, morale, and productivity.

Alienation can be conceptualized as either the lack of positive identification, or as a negative identification, with the work task. March and Simon (1958,pp.76-77) hypothesize the conditions of basic work technology that are thought to be associated with the worker's identification with his task. It will be noted that some of the propositions reflect the intrinsic effects of the technology whereas others use mobility aspirations and mobility opportunities as intervening variables. March and Simon posit that:

> 1) ... The more a particular task is perceived as a training rather than as a terminal job, the weaker the identification with it.
>
> 2) ... Low level tasks ... do induce task identification where mobility is not anticipated.
>
> 3) ... The more a given task reflects a high level of technical skill, the stronger the identification of the individual participant with it.

> 4) ... The more a given task reflects individual autonomy in making decisions, the stronger the identification with the task.
>
> 5) ... The more a given task (involves) the use of a number of different programs rather than a single one, the stronger the identification with the task.

These hypotheses tend to be consistent with the data already presented on the differential likelihood that workers will find satisfaction and meaning in various types of technologies, and with the mixed findings emanating from studies of the consequences of automation. Clearly, skill level, autonomy in decision-making, and the variety of required operations in task performance are related to one another, and each in turn appears related to the type of technology in use.

While Dubin (1958,p.175) agrees that skill specialization and extreme subdivision are concomitants of the technology in use, he is not entirely sure that the consequences of skill specialization are always in the direction of enhanced worker satisfaction and commitment to the type of work. He postulates five possible dysfunctional consequences of skill specialization. We must note, however, that he appears to be discussing specialization by task or machine function rather than the more inclusive type of craft specialization.

1. Commitment to a skill, and the development of expertise in it, results in the reduced ability of the worker to be transferred in the event that the technology changes.

2. More and more emphasis is placed on job training, a factor which March and Simons hypothesize to result in initially low identification with the work task.

3. The emphasis on training induces a tendency to job standardization in order to facilitate that training. By extrapolation, since greater standardization results in less discretion, and since the amount of discretion has been found to be related to satisfaction, greater standardization will likely result in less satisfaction.

4. In skills that may readily become obsolescent, workers themselves may place lower value upon their skill. Again, by extrapolation with the Foote, and Vollmer and Mills data, the intrinsic rewards of strong identification with a skill would not be forthcoming.

5. Finally, where there is a high identification with the skill, the specialist may tend to view his own particular set of operations with undue narrowness. This heightens management's need to increase coordinative activities, thereby making the worker susceptible to more supervisory contact than is strictly necessary when viewed from the perspective of the task itself. By extrapolation, again, work satisfaction has been found to be inversely related to closeness of supervision, and reduced satisfaction may then be a consequence of high skill identification.

We may recall that Faunce's study of automobile workers in a newly automated plant found that, as a result of technological factors, they had reduced opportunities for interaction while working (1958). In turn, interaction opportunities were related to satisfaction with work. Blauner (1964) compared the opportunities for interaction permitted by different technologies, and concluded that they were highest for craftsmen and

continuous process workers, low for assembly-line workers, and lowest for machine-tenders. Walker and Guest (1952) have supported this view of assembly-line workers. Dubin (1958,pp.104-105) neatly classifies the types of work groups necessitated by the technological process.

Apart from the worker who performs his work task in isolation, Dubin states that there are three types of formal work groups theoretically possible. The one which will actually be used is determined by technology. The team group is found when rationalization of the work is low. The team is given the job, the raw materials and tools, the approximate schedule for completion, and itself divides the work among its members. Discretion and autonomy are consequently high. The task group is found in a technology wherein rationalization has progressed to the stage that each worker has a clearly defined job which is his and his alone. However, rationalization is still sufficiently low to allow that workers exercise autonomy over their work operation. Examples of this type of work group are found in Roethlisberger and Dickson (1939) and in Roy (1953,1954). Finally, the technological group, which is best exemplified by the assembly-line, is the product of a technological process wherein rationalization has progressed to the point that the work stations and work tasks are strictly assigned, and pace is determined by machine. Neither is there much discretion over the manner in which the task is to be performed nor autonomy over pace. Moreover, interaction possibilities are greatly reduced.

Therefore, to summarize, the usual linkage appears to be as follows: Technology determines the type of work group, the amount of worker discretion, and worker autonomy. The type of work group determines the extent to which there can be satisfying interaction opportunities. Discretion, autonomy, and pleasant interactive opportunities determine some of the satisfaction experienced in work.

Let us now leave the relationship of technology to alienation and satisfaction in order to consider some of the other important social consequences that have been found to emanate from technological factors.

TECHNOLOGY AND OCCUPATIONAL SOCIALIZATION

It is now a commonplace finding that the more elaborate and complex the technology is required for given work tasks, the more lengthy a period of occupation training will be required and the more likely it is that the training will be formal. This is reflected in the many statistics which, without exception in the literature we have examined, find high correlations between skill level and years of schooling completed. The correlations are high despite the fact that apprenticeship programs tend not to be counted in years of formal schooling, thereby reducing the relationship to an uncalculated degree. A sample of the high degree of relationship is offered from Inkeles and Bauer (1961,Table 32,p.138) for a Soviet sample.

TABLE 6

EDUCATIONAL ATTAINMENTS OF SOCIAL CLASS GROUPS

Education Attained	Intelligentsia	White Collar Employees	Skilled Workers	Ordinary Workers	Collective farmers & peasants
0 - 4 yrs.	--a	7%	30%	56%	69%
5 - 7 yrs.	7	26	43	33	22
8 - 10 yrs.	22	40	24	11	9
Some College	28	12	3	--a	--a
College Grad.	43	15	--a	--a	0
Total Number of Respondents	557	553	225	382	267

a - less than 1 per cent

Of perhaps greater interest are those studies relating to factors other than the amount of education required by different types of work technology.

One interesting study, conducted by Pearlin and Kohn (1966) compares middle-and-working class fathers in the United States and Italy for the effects of social class and of features of their work upon the inculcation in their children of work-related values. Not unexpectedly, the middle-class fathers in both countries tended to favour self-direction on the part of their children whereas working-class fathers more greatly preferred that their children conform to external prescription. The authors then concern themselves with the unexplained variance, and find that they can account for nearly all the variance in the response patterns by dividing the data on three aspects of father's occupation, the last two of which are clearly technological and the first of which is in many respects a concomitant of technology. The three factors were (1) the closeness of supervision to which the father is subjected, (2) whether he works principally with things, with people, or with ideas, and (3) the degree of self-reliance his job requires.

They found that the degree of support for values related to self-control increases as fathers have jobs not closely supervised, which deal with people and/or with ideas, and which require self-reliance. Those fathers with close supervision, or dealing with things, or not requiring self-reliance tended to give more support to parental values supporting obedience. Despite

an intercorrelation between jobs having related characteristics, the researchers found that each of these job characteristics made an independent and cumulative contribution to this value pattern. Moreover, type of job (in terms of these dimensions) explained almost all of the variance whereas father's occupation (in terms of the standard ranking of occupational titles) explained only a little. The conclusion which we may draw from this study is that given work technologies generate the appropriate norms for either self-direction or obedience, and that these are then passed along to the succeeding generation through parental socialization.

In a review of the voluminous literature on career planning in conditions of pervasive technological change, Slocum (1966,p.43) comes to the generally-held conclusion that one's work life, at whatever occupational level is likely to be interrupted by unforeseen changes in technology. He echoes the generally not yet satisfactorily demonstrated though widely held belief that in a situation of accelerated occupational change accompanied by technological innovation, it is general education rather than specific vocational education which minimizes the possible negative effects of job disappearances and skill obsolescence. (For a compilation of the recent literature supporting this view, see Halsey, Flood and Anderson, 1961, Part 1.) Slocum mentions one other logical consequence of excessive technological change which is also of interest - the heightened difficulty of purposive and rational occupational choice when the available occupations are

in a state of flux - but unfortunately he cites no research evidence to support this contention.

TECHNOLOGY AND SOCIAL MOBILITY

An interesting study by Stone (1953) relates mobility opportunities to the technological production methods used. In a study of 306 managers in four different plants, he divides the production method used into three types - an old style production method is one where skilled workers are in the majority; a mixed production is one in which skilled and semi-skilled labour predominate and a modern method is one which typically uses semi-skilled and unskilled workers. Stone hypothesizes that the lowest mobility rates will be found in the factories with modern production, and that the mixed production method will have the highest mobility rate. His data confirm these hypotheses although there were intervening factors like ethnicity, religion, race and kinship to consider as well.

Blauner's data indicate that workers' expectations of mobility opportunities are conditioned by the predominant technology in their industry (1964, Table 49, p.288). Three quarters of those in the machine-tending textile industry and two thirds of the workers in the assembly-line automobile industry felt that their chances to advance beyond the foreman level were not good, whereas only slightly more than half of the workers in the craft and continuous process industries felt the same way. It is unfortunate that Blauner chose to use expectations of advance beyond the foreman level as his

indicator. Since advances to the foreman level are increasingly dependent on amount of formal education, and since advances beyond that level are even more closely tied to educational level, the response pattern may be more closely related to completed education than to inherent characteristics of the technology. Blauner's description of the mobility opportunities in the continuous process industry is also suggestive of some rather complex relationships between technology, mobility opportunity and satisfaction. Initially there were many openings at higher levels which were filled from those at lower levels within the company. This tended to raise satisfaction level appreciably, but it also had the effect of raising and/or reinforcing the mobility expectations of those still at the lower levels.

Since the promoted workers were happy with their work, and tended not to leave in any large numbers, thereby leaving few openings, the mobility rate dropped at the same time as mobility expectations were still high. This then had the effect of depressing satisfaction for the lower level workers, who became impatient and frustrated by the slowness of their own advance.

Slocum (1966,p.173) cites a study by Broom and Smith (1963) in which it is suggested that certain occupations provide experience which facilitates easy movement from one occupation to another. The implication here is that intrinsic features of the work build up skills and abilities that are readily portable from one occupational sphere to another. Such occupations

are called "bridging occupations", and Broom and Smith believe that among the occupations of this type are butler, soldier, school teacher, peddler and professional athlete.

TECHNOLOGY AND INFORMAL POWER

Both Dubin (1958) and Crozier (1964) examine the relationship between technology and the opportunity to achieve informal power without any necessary change in formal position. Each defines power somewhat differently, but ends with a description of an essentially similar process.

Dubin (1958, pp.63-64) treats power as the potentiality for disruption of integrated work flow that is attendant on a complex technology requiring a high degree of interdependence. When the work of any employee is a precondition for the work of other workers at different stages of the productive process, then a certain amount of power resides in that employee. In this sense, almost all employees in a complex, yet not automatic, productive process have power. An excellent example of the utilization of opportunities inherent in the division of labour may be found in Roethlisberger and Dickson's description of the Bank-Wiring Room, (1939, pp.487-492) in which the wiremen and soldermen were able to capitalize on the fact that correct sequencing of different operations required their cooperation. When they wanted to show their opposition to one of the inspectors, they withheld this cooperation to the point of making it impossible for him to do his job and ultimately resulting in his permanent withdrawal from the workroom. However,

Dubin did not point out that amount of power possessed by any one worker is related to his vulnerability to sanction and to his replaceability. Therefore all the separate factors determinate of these - his degree of skill, his protection by the union, the availability of others who might replace him, etc., serve as more important determinants than technology alone in accounting for the worker's ability to garner informal power to himself by virtue of his place in the division of labour.

Crozier (1964,pp.156-174) treats opportunities to attain informal power as deriving from the amount of uncertainty surrounding the work performance of any employee. That is, the less other workers are able to predict the behaviour of a given worker, the more power has the latter over the former. Some of this uncertainty is related to a worker's functional autonomy and his ability to exercise discretion, and much of this is formally built into the hierarchy and represents formal rather than informal power. But, Crozier continues, those workers who can relate to the technological process in ways which others cannot sufficiently understand so as to predict their behaviour have the opportunity to translate the co-worker's inability to predict into power opportunities for themselves. In the tobacco factories studied by Crozier, the maintenance workers were able to surround their work function with this sense of mystery, and therefore enjoyed informal power far in excess of that accruing to their formal rank. The power of the expert is therefore to be accounted for by the fact that the expert is the

person for whom uncertainty tends to be minimal. However, this source of power may be self-limiting in that the expert's own success tends to reduce the uncertainty. Therefore, one may be left with the paradoxical finding that the better his role is performed, the less uncertainty, and therefore, the less informal power.

In an approach somewhat analagous to that of Crozier, Carlin (1962) looks at the degree of certainty embodied in legal technology, and the consequences of variation in certainty for a variety of career contingencies. Carlin divides a sample of sole practitioners and small firm lawyers in Chicago into lower and higher-level lawyers. Lower-level lawyers are those whose "practice consists largely of a bookkeeping operation, seldom going beyond the filling in of a standard form or a rare time appearance before court or agency". Higher-level lawyers are those whose practices require higher skills in that the work intrinsically is unstandardized and non-routine. Lower-level lawyers are far more subject to competition than are the higher-level lawyers, a perhaps natural consequence of the routine nature of their work which makes the services of one practitioner readily substitutable for another. Moreover, among lower-level lawyers, those with specializations in real estate and corporate work are subject to a high degree of competition from non-legal sources - real estate brokers, mortgage companies, banks, and trust companies; those with specialization in personal injury are not subject to much competition from non-lawyers but the

competition from other lawyers is very high. Among higher-level lawyers, only those in real-estate and business-corporate fields are required to make much use of their high technical skill. For higher-level lawyers in personal injury, tax and divorce specializations the skills more important than technical expertise are those related to business-getting and institutional manipulation. For these men, while the work intrinsically demands high technical skill, these need be augmented by market skills.

TECHNOLOGY AND THE ORGANIZATION

It is generally accepted that while organizational structure is not completely dictated by the technology in use, technological considerations set the boundaries within which the structure is free to vary. No lengthy exposition of how schools require classrooms, teachers to man them, a standard curriculum, etc., etc., is necessary to demonstrate the linkage between a given work task, the technologies available to perform it, and the structural forms in which the performances are embedded.

Bell's summary point even though it refers primarily to industrial organizations, is sufficient.

> The contemporary enterprise was set up to obey three peculiar technologies; the logic of size, the logic of metric time, and the logic of hierarchy. (The logic of hierarchy is dictated not only by the technological division of labour but by size as well.) Each of the three, the product of engineering rationality, has imposed on the worker a set of constraints with which he is forced to wrestle every day. These condition the daily facts of his existence (1962,p.230).

In a unique and widely acclaimed study, Joan Woodward demonstrates the efficacy of an organizational structure which is congruent with manufacturing techniques. Using commercial success as her criterion of effectiveness, Woodward concludes that different technologies impose different kinds of demands on individual organizations and that these demands have to be met through an appropriate structure. Success accrued to those firms in which form and function were complementary (1958).

Wilensky (1956) discusses the consequences for labour unions of adding to their staffs sets of technical experts, each with a specialized technology. One class of expert - the Facts-and-Figure-Man - was essentially composed of the social science and business researchers whose work became required by the union as the collective-bargaining process became more complex. Their participation in the union has several important consequences for the organization. First, it tended to introduce a strain of rationality and responsibility into the strategy of union negotiators and tended to make their approach more conservative. In this respect the organization was "professionalized" in that technical expertise became one of the criteria of strategy and policy-making. Several consequences at the rank and file level were also observed; the prestige of the leadership was enhanced, morale about collective bargaining prospects was increased, and fringe benefits, dependent on technical arguments, were often won. However, when the facts-and-figure men owed more allegiance to the judgements of their

discipline than to the strategic desires of the union, certain dysfunctional consequences were likely, particularly insofar as the issues at the bargaining table were more highly determined by the relative power of the parties than by the strength of the technical arguments (pp.52-60).

Another type of technical expert - the Contact Man - has been necessitated by the needs of unions to maintain and use contacts with a variety of agencies and organizations in the non-union world. These experts are usually politicized lawyers or public relations men. Wilensky discusses the consequences of their activity for the organization. At the level of the union leadership, a "beat-the-game mentality" is introduced so that union leaders tend to think that all clashes of interest can be "fixed" or smoothed over. This tends to mitigate the "rational responsible bias" introduced to the organization by the use of facts-and-figure-men. Another result is that union leaders are placed under constraint to live up to the public images provided for them by the contact-men, and that this need to cultivate good-will induces some tendencies to "play it safe". To the extent that the imagined policies are non-existent or uninterested, this may be an unrealistic or unnecessary constraint, and hence this consequence might be dysfunctional. Wilensky concludes that, on balance, the direction of the Contact Man's influence on the organization is toward the "beat the game", "cut the red-tape" bias (pp.78-79).

The last type of technical expert discussed by Wilensky is the Internal Communications Specialist, the professional writers, editors, and speakers who are used primarily to address the rank and file on behalf of the organization. The functions attendant on their use tend to be the support and buttressing of top officer prestige and authority, the promotion of manipulative leadership styles to replace coercion, and the diminution of the expression of organized dissent as a result of partisan monopolization of communication channels (pp.102-103).

The major summary point to be made in connection with this material is that as the technological requirement of unionism became more elaborate, technically competent experts were engaged to fulfill these needs, and as a consequence, helped to change certain aspects of the organizational structure. As Wilensky concludes,

> The function fulfilled by all types - short of buttressing top leader power and prestige - must, indeed, work in the long run to suppress radical tendencies pushing up from below. The "civilized" bargaining style promoted by the Facts and Figures operation, the smoothing, fixing and expediting contributions of the contact man - these inevitably work toward the motivation and accommodation of conflicting union and non-union interests. They further the integration of American labour into the complex bureaucratic machinery of a private enterprise economy and a pressure group policy. Any worker disaffection that may result from this trend will result in increasing employment for Internal Communications Specialists, whose propaganda and group work skills are indispensable in the transformation of discontent into loyalty, opposition into properly constructive participation (p.106).

From our perspective, the organizational roles played by the experts, to use Parsonian terms, are as follows: fact-and-figure-men play goal attainment roles, contact men play short run adaptive and long run integrative roles, and internal communications specialists play pattern-maintenance roles.

II ORGANIZATIONAL STRUCTURE

We do not propose to elaborate or to make any additions to prevailing theories of organization. Indeed, the organization is our unit of analysis only insofar as its states are determinant of our main concern - work-related behaviour and work attitudes. Most of the literature to be reported will consider structural features of the organization as independent variables; at times other structural features may be treated as dependent, but only in those cases where they are part of causal chains the final link of which is behavioural or attitudinal. The sections into which we subdivide the material are chosen for convenience only, and many contributions could as easily be accommodated in sections other than the ones we have chosen to place them.

THE FORMAL ORGANIZATION

The literature is replete with references to the formal organization as it is officially designed, with its legally designated set of positions, channels of communication, lines of authority and decision-making, formally assigned work tasks, and so on. There is a general consensus that no organization operates in fact as its formal design would indicate and it is customary to designate those patterned, stable, and recurrent deviations from the official design as the informal organization. Sociologists, particularly those who follow the structural-functional theories, have appeared more interested in the informal, as compared to the formal, structure and were

this a paper on organization theory, the citations would be overwhelmingly weighted in this direction. Still, we must introduce consideration of the formal organization since its structure sets the boundaries of all the behaviour encompassed therein.

Slocum (1966,pp.46-49), following the Parsonian model, describes work organizations as comprising the following structural elements: (1) Organizational Relationships - the network of regular and predictable relationships among the members of the organization; (2) Positions, or status-roles, which are hierarchically arranged, functionally specified, and for which the respective duties and obligations, rights and privileges are detailed; (3) Boundaries - the points in the work system where members are differentiated from non-members, and which usually have a spatial referent as well; and (4) Organizational Sub-Culture which includes the history, rules, sanctions, values and goals, and which provides guides to organizational members for behaviour appropriate to the given work setting.

When these elements become formalized in the following manner, we speak of the ensuing formal organizational structure as a bureaucracy. Bureaucracies have:

1. Fixed and official jurisdiction areas, which are regularly ordered by rules, that is, by laws or administrative regulations
2. Principles of hierarchy and levels of graded authority that ensure a firmly ordered system of super-and-sub-ordination in which higher offices supervise lower ones

3. Administration based upon written documents; the body of officials engaged in handling these documents and files, along with other material apparatus, make up a "bureau" or "office"

4. Administration by full-time officials who are thoroughly and expertly trained

5. Administration by general rules which are quite stable and comprehensive (Presthus, 1965, p.5, cited directly by Slocum, 1966, p.60)

Dubin (1958,Chap.4) divides the work organization into technological, formal, non-formal, and informal behaviour systems. The formal behaviour system is the one which specifies the minimum conditions of acceptable membership in the work organization and sets forth the broad rules, regulations, and procedures governing conduct and behaviour while at work. Its functions are to specify the organizational goals and the range of permissible choice of behaviour to achieve them, the rules of personal conduct, the duties and responsibilities of the individual to the employing organization, and the concrete values expected of all members. It is through the formal behaviour system that the organization's authority relations are legitimated.

One's position in the formal behavioural system is one of a set of hierarchically arranged positions. Dubin divides the hierarchy into three separate status ranks - jobs, positions, and offices - and each rank is a function of variable values on tasks, duties, responsibilities, rights,

obligations, and privileges. Generally as one moves from jobs, through positions to offices, there is a shift (1) in task from technological to authority elements, (2) in duties from mere contractual commitment to high intellectual and moral commitment, (3) from minimal responsibilities and being under high degrees of external control to ultimate responsibility and being under self-control, (4) from uniform use of rights to great discretion in the use of greater rights, (5) from fewest to most performance obligations, and (6) from fewest to most privileges. Whether the rank is a job, position or office will determine the ease with which it will be filled, the criteria used to fill it, and the amount of allowed or expected initiative from the incumbent (1958,Chap.5).

Simon (1944) defines the formal organization in terms of the rationally-devised plan through which decision-making, at each level, will be most rational, efficient, and effective. The making is an arrangement whereby decisions made about ends at any one level constitute the accepted premises at the next lower level. Discretion should be given in choice of means but not in choice of ends. Simon suggests that the individual worker can be successfully influenced in at least five ways to behave rationally: (1) authority, (2) identification, (3) the criterion of efficiency, (4) advice and information and (5) training. Since these are, to a large extent, interchangeable, the successful formal administrative structure will choose the most efficient and effective means for the given circumstance. Two

processes of decision-making - planning and review - are important to the administrative structure, but whereas planning always implies greater centralization of authority, review permits either centralized or decentralized decision-making.

Gross (1965,p.10) suggests that the way in which labour is divided depends on more than the authority structure and on the "rational" division of the work. Moral considerations overlay a set of culturally prescribed, particularistic dimensions as well. The limits of organizational pervasiveness may, for example, be rooted in the nature of the national society so that, for example, the Soviet worker is not related to the work organization in as contractually circumscribed a way as the American worker. The pervasiveness of the formal organization, or to use Etzioni's term, its "embrace", will be determinate of a particular authority structure designed to maximize effectiveness.

Finally, Dalton (1959) can be used as an illustration of an argument put, in varying degrees of agreement, by Roethlisberger and Dickson (1939), Selznick (1949), Gouldner (1954), Blau (1955), Strauss et al. (1964), and myriad others, that having explained the extent to which the formal organization is determinate of worker-behaviour and worker-feelings and attitudes, one is still left with the task of accounting for all the patterned, stable and recurrent deviations from the organization as "it is designed". Dalton's statement is a sophisticated description of the organization as "it is":

> Organizations are systems of formal roles that direct and shape role occupants. Roles never coincide perfectly with players. At times the system must alter roles and manipulate occupants to preserve itself. Personal sentiments encourage and maintain distortions. While appearing to respect the ethics of his group and of the organization, the occupant must be able to take multiple informal roles, and to deal with those of others while preserving the essentials of his chartered role. Through personal endorsement and aid from others, the strong occupant shapes his role as it guides him, as against the weak occupant who offers only minimum aid to his role.
>
> In variously compromising its ends, the organization forces role occupants to assert, compromise, their innately human purposes (1959,p.259).

BUREAUCRATIZATION

As noted above, it is a characteristic of certain work organizations that they are highly bureaucratized in their formal design of structure, routines, and procedures. Weber, the father of the theory of bureaucracy, held that the conditions of effective performance of an organization's lower level participants are: a money salary connected with the opportunity for a career not dependent upon accident or arbitrariness; strict discipline and control dependent not only upon rules but also on the development of a sense of honour and of prestige sentiments; the development of status group sentiment; and forms of impersonality at work which support the formal separation of the work life from the non-work life (Weber, in Gerth and Mills, 1958,p.203).

Hall and Tittle (1966) find that the five correlates of bureaucracy are impersonality of operation, hierarchy of authority, division of labour, specificity of procedures, and complexity of rules, and that these items form a Guttman scale, - that is, if an organization is found to have highly complex work rules, the four preceding items will also be present. Treating these items as variables, they postulate that the higher the values on the variables the more bureaucratized will be the organization. A moderately strong association was observed between the degree of bureaucratization and organization goals concerned with objects rather than ideas. Less association was found between degree of bureaucratization and organizational size, the number of departments or divisions in the organization, the nature of the official organization goals, or the extent to which the organization is people-oriented.

Stinchecombe (1959) holds that Weber's ideal type includes items purported to be intercorrelated in <u>any</u> system of rational organization, but which are not, in fact, invariably present. He points out, on the basis of his comparison of mass production and construction industries, that bureaucracy <u>and</u> professionalization of labour are alternative ways to achieve rational administration. Each mode of organization fulfills the requirements of rationality which are (1) the separation of work position from household, (2) the allocation of work on the basis of competence and (3) pecuniary compensation regulated by the status of the worker. But bureaucratic

organization goes beyond the minimal demands for rationality by emphasis on: (1) the development of the files and employment of clerks, (2) hierarchical command, advice, and authority structures, and (3) career commitment to an organization rather than to an occupation. Stinchecombe posits that craft-organized industries do not require these elements for rationality since the professional socialization of the work force gives the workers sufficient understanding and commitment to appropriate values to ensure efficient and effective performance, integration of effort, and co-ordination. Furthermore, the variability in volume of production and of product mix would make the bureaucratic elements irrational for the construction industry, the craft organized industry taken as his example.

It is interesting that Weil (1952, pp.73-78) considers the very factors thought by Weber to induce greater effectiveness among the lower level employees to produce worker rootlessness, or alienation. Weil's program to reintroduce rootedness for the working man can be read as a direct elimination of the criteria used by Weber to define bureaucracy. In this connection, it may be recalled that Weber regarded bureaucracy not as a threat to man's rootedness but to political democracy.

Wilensky (1956, p.276) in his study of labour unions found that there were strong tendencies which slowed down the rate of union bureaucratization. These were: (1) entrenched traditions of patrimonial and charismatic leadership, (2) political and nepotistic recruitment, (3) the absence

of regularized salary structures, tenure systems, and promotion procedures, (4) the employment of many experts with non-bureaucratic role orientation, (5) the high influence of the least bureaucratized experts, (6) an all-pervasive anti-intellectualism, (7) imperatives toward personal loyalty and "pro-labour" attitudes, (8) a recurrent atmosphere of crisis and (9) a demand for organizational flexibility.

The consequences of the low degree of union bureaucratization were: (1) greater objective success in goal achievement (asserted but unsubstantiated), (2) a low degree of autonomy for employed experts, (3) fluid and loose lines of influence and authority, (4) minimal application of criteria of formal training for purposes of recruitment, (5) non-permanent tenure for employed experts and (6) greater career success for non-bureaucratic types. Moreover, the flat pyramidal rank and authority structures left small room for promotional or salary advancement (1956, pp. 243-258). Greater objective success in goal achievement is thought to be the result of the greater flexibility and the lesser pressure for conservation, overconformity, and technicism that are associated with low degrees of bureaucratization (p.278).

Crozier regards bureaucratization not as a rational and efficient means of goal achievement but as an organizational aberration, a vicious circle wherein dysfunction is productive of yet more dysfunction. The vicious circle comes about as the result of the interplay of (1) impersonal

rules, (2) centralized decision-making, (3) isolation and high social distance between social ranks, and (4) the emergence of parallel power relations. He offers the following propositions:

1. The greater the elaboration of impersonal rules, the less the operative relevance of superior - subordinate relationships (compare Gouldner, 1954).

2.(a) The greater the desire for impersonality, the greater the pressure for centralization.

(b) The greater the degree of centralization, the less the opportunity to exercise discretionary power.

3.(a) The greater the degree of impersonality and centralization, the more complete will be the isolation of each stratum from other strata.

(b) The greater the isolation of any stratum, the greater will be the pressure of the peer group.

(c) The combination of impersonality, centralization and isolated strata gives rise to ritualism.

4.(a) Power relationships will develop around those few areas of uncertainty which exist.

(b) The fewer the areas of uncertainty, the more power will be generated in those areas of uncertainty which do exist.

(c) The more narrowly regulated is an organization, in terms of impersonality, centralization and strata isolation, the greater will be the independence of the experts who deal with uncertainty (1964, pp.187-193).

By introducing a psychological premise similar to that implicit in Dalton (1959) and Strauss et al. (1964), that there is an active tendency on the part of any human agent to take advantage of present opportunities to

very point, Westley and Elkin found that upper-middle class metropolitan parents were unlikely to leave the peer group associations of their children to be solely determined by the youth themselves. These parents were found to intervene, albeit subtly, in both the membership and activities of their children's peer groupings and helped thereby to ensure congruence between peer and family success orientations. Westley and Elkin refer to this parental strategy as providing a "protective environment" (1956).

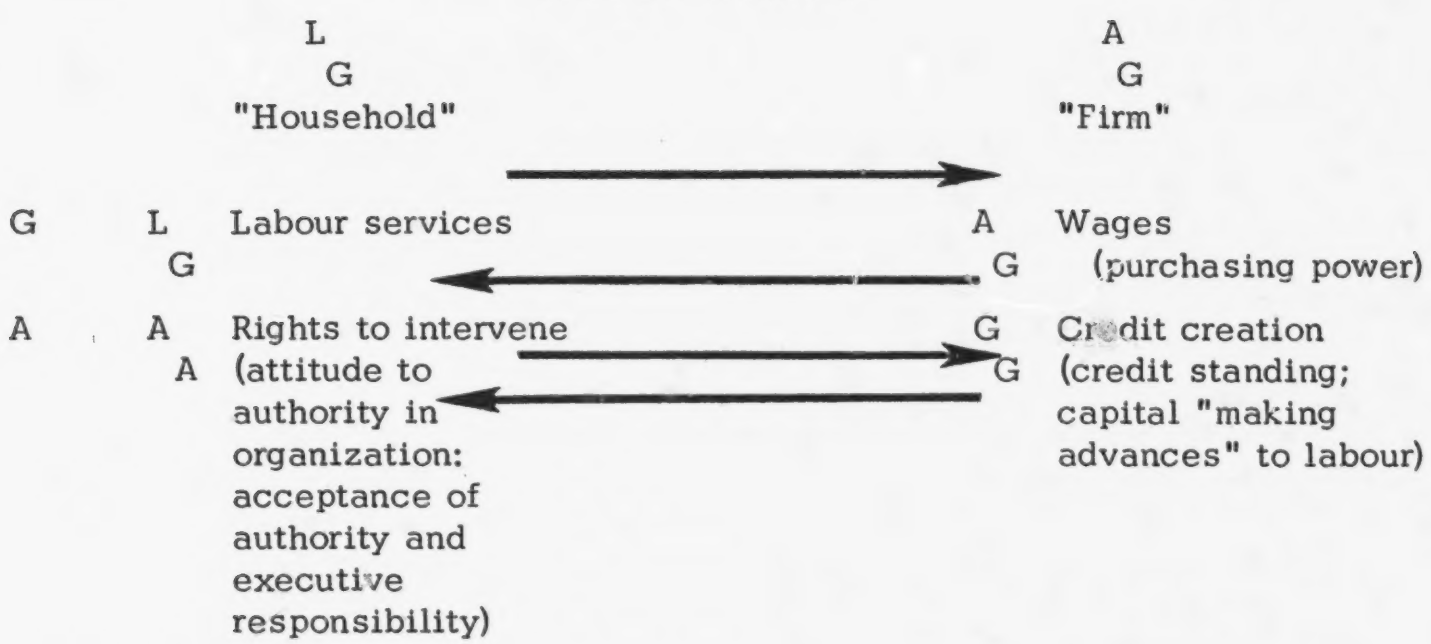
IV ENVIRONMENTAL FACTORS

In this section, we review some of the relevant literature which seeks to link work organizations and work-related behaviour to environmental factors. We have divided these latter into economic, socio-cultural, and community factors, although as has been pointed out in other sections, the separation is approximate and not watertight. The reader should also bear in mind that our review is of literature which treats as the dependent variables of concern those involving work-related behaviour and work-related attitudes. Were the organization itself the dependent variable, a much more extensive literature would be reported.

ECONOMIC

Parsons and Smelser (1956, p.114) define an occupational role in economic terms by their insistence upon its contractual nature. The contract covers the relationship between an organization and an individual, who is regarded as acting in a representative role as a member of a household or some other collectivity. It is their view of the occupational role as involving an economic contract which prompts them to see the labour market in the terms represented by Figure 1 (p.119).

LABOUR MARKET



Value system of the market as a synthesis of economic rationality and security.

It should be noted that the Parson and Smelser view of economic exchange goes far beyond the mere exchange of labour services for wages but includes the exchange of integrative and normative goods as well.

Stinchecombe (in March, ed., 1964, pp.164-166) presents a typology of work which is based primarily upon the differential marketability of types of labour. The terms and conditions of the work contract, and the ease with which each party to it may operate, are the premises underlying the 5 criteria which he presents. The criteria are:

> (a) the nature and quality of preparation for work roles outside employing organizations, particularly in schools,
>
> (b) the organization of licencing agencies and practices,
>
> (c) the nature of organized groups which determine the norms of the employment contract, such as unions and professional associations,
>
> d) the manner in which particular jobs are (or are not) integrated into careers in which the quality of current performance affects future statuses,
>
> (e) the structure of competition for labour, or looking at it from the view-point of the individual, the range of alternatives open to people occupying particular statuses (p. 164).

Applying these criteria, Stinchecombe sets forth the following paradigm (adapted from pp.164-165).

	I Workers tied to Kin or Family Enterprise	II Workers in Bureaucratic Organizations	Workers in Craft Organized Settings	IV Workers in Mass Industrial Settings	Workers in Service Occupations (non-craft)
(a)	Workers prepared in family or in empirical socialization in other business organizations	Preparation for work in schools	Union-supervised apprenticeships in firms of the crafts	Preparation for work generally not organized, but training is for particular firms	No special institutions for training
(b)	No licencing or educational qualifications	Qualifications judged by employer without government licencing	Unions certify competence and control access to work	No licencing or certification except by employer himself	Workers are not licenced
(c)	No organized groups mediating between family members	Employees are unorganized	Unions set the conditions of employment within wide limits	Employment conditions bargained between union and management	No organized groups between employee and employer
(d)	Career by tying fate of individual to that of family enterprise	Career is within a particular organization and is not tied to ownership	Careers are within the occupation and not a particular firm	Particular jobs not usually part of a career. Employer generally does not guarantee permanent employ-ment or advance-ment	Careers generally do not exist
(e)	Skills and estates rarely transferable to other enterprises	Range of alternatives usually limited by the stake	Alternative employment on same terms and conditions	There is much movement between factories by	Labour moves freely from one employer to another

built up in organization but more highly qualified have more cosmopolitan careers	generally available	workers; also movement in and out of this sector of the labour market

Wilensky (1956, p.232) uses marketability to account for the independence and influence of the professional employed by labour unions. First using the private consultant as a prototypical case, he notes that the more diversified his practice, the more easily he can maintain a professional-client relationship. His high prestige is associated with his outside contacts and his high fees, and is supported by his income and style of life. All this adds to an independence which permits greater objectivity and, supposedly, greater influence. The same factors which affect the outside consultant are found by Wilensky to differentiate among employed professionals - easily transferred skills, outside contacts, and a variety of acceptable alternative job opportunities.

Carlin (1962, pp.142-145) treats the situation of the sole law practitioner as an outcome of his vulnerability to lay competition for clients. Particularly in the real estate, business-corporate, and will-probate-estate fields is the independent lawyer subject to the competition of trust companies and banks, real estate brokers, accountants, etc. Carlin enumerates several reasons for this being so: (1) rationality, convenience and efficiency of their operations based on the volume of work which they do enables specialization and subdivision; (2) their more inclusive relationship with a client is a matter in which the legal aspect is but one part, places them in a position of market power; (3) they are more visible to the client, being allowed to advertise and to ethically solicit business;

(4) because their operations are rationalized, they can often give equivalent service at lower cost.

Carlin finds that these factors, plus the frequent "one-shot" nature of the need for legal services, place the lawyer in a disadvantaged market situation in which he has to use brokers - policemen, doctors, ambulance attendants, other lawyers - to find him business. The broker-lawyer relationship is on a quid pro quo basis. Carlin suggests that lawyers do not compete as much for clients as they do for brokers (pp.147-148).

Smigel (1964,pp.346-347) uses both economic and community factors to account for the organizational structure of large law firms. Differences in firm structure were accounted for by the number and size of the clients served by a given firm. The larger the number, and the smaller the size of client firms, the more the law firm structure tended to take the form of "small firms within large firms". Law firms with fewer clients of larger size tended to be structured more along formal and impersonal lines. Smigel also found that, outside of New York City, community custom would often determine whether a given type of work would be handled by a law firm or,for example, a bank.

Dubin (1958,Chap.7) discusses five institutional limits on managerial decision making, the last four of which are clearly economic. He suggests that the boundaries of managerial action are constituted by

(1) the legal system; (2) the complex interdependencies which limit the action of individual companies or individual industries; (3) the method of industrial financing which provides a brake on possible improvident action; (4) consumer resistances to certain changes; and (5) the contract with the labour union.

Goode (1967, pp.10-13) is able to account for the extent to which the inept will be protected by introducing, among others, economic factors. The protection of worker ineptitude increases when: (1) there is so high a demand for a given set of services that the organization or collectivity has difficulty in recruitment; (2) there is a low supply of services, output or candidates, especially in socially useful but not highly rewarded categories, and the necessity of the service makes demand somewhat inelastic so that it doesn't fall in a matched response to low supply; (3) stringent enforcement of efficiency norms creates problems in the socio-political structure; and (4) there are positive consequences - loyalty, for example, accruing to the superior for the protection of the subordinate. However, an economic consequence of protecting ineptitude too well may be not surviving the competition from those at the same level (p.14).

Heberle (1948) discusses some of the social consequences of the late industrialization of the urban South. Its effects on ecology were the encircling of a rural non-farm population by a working class population located in a ring about industry which, being late in arriving, had to place

itself on the periphery of the city. This also had the effect of exacerbating the even then pronounced spatial segregation between Negroes and whites. There were also telling effects upon social stratification. The old upper class was supplanted by new industrialists. Social distance between the classes increased. An urban white permanent working class emerged, and old paternalistic patterns vis-a-vis Negroes began to break down under the strain of industrial rationality.

SOCIO-CULTURAL

Our concern here is with the features of the wider social structure and the environing culture that shape, determine, or at the very least impinge upon, the work organization and work-related behaviour. Some of the topics covered will be the meaning of work, public legitimacy of work organizations, cultural differences in the definition of work and of organizations, professions as broad social mandates, etc.

We may begin with the Morse and Weiss study on meanings of work (summarized in part in Nosow and Form, 1962, pp.29-35). Using the national U.S. sample of 401 men, their key question was something like "What would you do if you were no longer required to work?" The exact wording of the question made it clear to the respondents that their financial needs were presumed to be met. They found that work has meanings other than financial remuneration, but that there was significant difference between the working class and the middle class. The men gave both negative and

positive reasons for wanting to continue work, ranging from fear of idleness (classified as negative) to wanting to be associated with people (classified as positive). For working class men, work tended to be valued for its activity value, that is, for its keeping the man active. For men in middle class occupations, the more typical answer was that it was the intrinsic nature of the work task that was thought to be rewarding. Morse and Weiss also found that there was no single definition of work satisfaction which cut across classes. The meanings attached to work satisfaction tended to be clustered within occupational categories.

Inkeles, in a secondary analysis of data gathered in a number of industrialized countries, states that "evidence is powerful and unmistakable that satisfaction with one's job is differentially experienced by those in the several standard occupational positions. From country to country, we observe a clear positive correlation between the over-all status of occupations and the experience of satisfaction in them" (1960,p.12). Inkeles also found that the same differential experience of satisfaction with the job held for components - pay, for example - of the job, but here the data indicated that American workers, at whatever pay level, tended to be more satisfied with their income than workers in other countries. Cross-nationally, workers appeared to favour security above pay increases at the risk of security, but Inkeles found that if success or advancement was guaranteed, a greater propensity for risk-taking was triggered (pp.12-13). Inkeles' conclusion,

based upon the same relative ranking of workers, on the various questions regardless of country in which the data were gathered, was that the factory system and large scale bureaucratic organization produce standardized contexts of experience which imprint the culture of the system on the workers in approximately the same way, and therefore that "industrial man" should be expected to relate status to experience, perceptions and values in approximately the same way regardless of the overlay of national culture. Further corroboration is given to this conclusion by the Inkeles and Bauer study of Soviet emigrants. They state,

> ... we cannot but be struck by the degree to which its (The Soviet Union) features resemble those of most Western industrial nations. The Soviet factory and large scale farm have substantially the same structure of authority relations as a large factory or farm in Europe or America. The role of technical competence and the pattern of economic reward is very similar in both places. It follows, then, as we have seen, that the relative evaluations of work experiences ... should be similar in important respects to the relative evaluations of their experiences by appropriate 'opposite numbers' in Europe and the United States (1961,p.125).

Inkeles and Bauer suggest that those uniquely Soviet features noted in the various response patterns will decline as the more general characteristics of modern society become more important.

Landes (in E.E. Meade, 1951) considers the cultural characteristics of a given country to be far more determinate of differences than has heretofore been suggested. To the question "Why is French business so conservative and static?" Landes answers that it is fundamentally culture that is responsible. He holds that the social structure and cultural patterns of France enforce that type of business pattern. Also in French study, Crozier (1964, p.282) concurs that the high value placed on absolute authority together with the idealization of individual mastery and self-control, and a genuine feeling of equality - all of which are part of the French culture - is responsible for the particular shape of both bureaucratic involvement and entrepreneurial activity in France.

Similarly, Dalton (1959, pp.264-266) suggests that bureaucratic theory is largely inapplicable in the United States for reasons embedded in the American social structure and culture. We reproduce his argument in some detail since much of it is so germane to the factors under consideration in this paper. (1) American values concerning equality militate against norms of impersonal selection and treatment, and against authority being vested only in office. (2) Bureaucratic theory assumes the individual to be more passive and inert than he is in fact. Rule-following tends, in American culture, to become subordinated to the seeking of individual self-interest. (3) In large organizations, local and personal demands take precedence over the demands of the larger unit. Rather than the expected loyalty being to the "organization" first, it is more likely that loyalty is first to the department, then the division,

and only finally to total unit. Organization response to this often becomes progressively unbureaucratic as new controls are developed for the wrong reasons. (4) Bureaucratic theorists tend to underestimate the ability and the will of subordinates to adjust rules and procedures to their own benefit. American values favour "getting around rules", contempt for both formalism and elitism. Where values do favour bureaucratic control, it is for levels below one's own. (5) Expanding organizations often require arbitrary and autocratic action despite the stress on democratic equalitarianism. Dalton holds that bureaucracies which recruit impersonally and contain their members in well-defined roles are compromised equally by both autocratic and democratic pressures. (6) Some problems cannot be solved by the formally related chart of officers but by cross-cutting cliques which, while effective, give the lie to the bureaucratic structure of authority and relationships. Informally evolved cliques appear also to be deeply engrained in the American cultural pattern.

Another particularly American pattern is the public acceptance of the legitimacy of "big business". Gross (in Faris, 1964,pp.635-640) reports research on this to the effect that, even in the Depression, 75 per cent of those polled gave favourable responses to the question asking whether big business concerns were good or bad for the country. Similar results were found in studies conducted in the 1950's; 76 per cent believed that the advantages of big business outweighed the disadvantages; only 13

per cent felt that big business was the most powerful of the group, which included small business, labour unions, state governments, and national government. Considered as employers, 46 per cent believed that big business pays higher wages than small business; 53 per cent felt that it provided more job security; and 78 per cent believed that it helped to create jobs. The balance of opinion on big business was favourable despite the fact that 71 per cent found big business profits excessive. This latter finding may suggest that the consumer role is not as salient as is the role of wage-earner for high prices, even excessively inflated, can apparently be tolerated when job security, job opportunity and level of wages are protected.

Goode (1967, p.5) suggests that the inept are protected for reasons embedded in a socio-cultural matrix. He feels that patterns of protection are not so much an evasion of achievement norms as they are an honouring of other cherished values and beliefs: loyalty and cooperativeness from the protected; welfare concerns and humanitarianism from the protectors.

In a comparison of Crozier's description of the French bureaucracy and various studies of the Japanese and American systems, Goode suggests that the French system reaps the least benefit from its protection of ineptitude, and the American system the most. The crucial element appears not to be protection <u>per se</u> but efficient utilization as well. He concludes that similar types of structure, located in different cultural systems, may

give more or less protection to the inept, and offer more or less protection from the inept (1967, pp.17-19).

Weber (in Gerth and Mills, 1958, p.201) suggested that the demand for trained competence in public administration was a force in the public opinion of the United States, which was mitigated only in large cities where immigrant votes were "corralled". This demand weakened the dependence of the officials on the political hierarchy and was thought to ensure qualitatively better service. But, realizing the incapacity of so nebulous a factor as public opinion in the judgement of competence, Weber suggested that even politically appointed judges were superior in qualifications and integrity to elected judges. Weber held that the changes in public opinion that led to the desire for competence and honesty grew out of the reform wave instituted by the "muck rakers" who attacked the excesses associated with political hacks appointed by the elected officers.

The deeply engrained pattern of particularism in American culture is revealed in a study by Dalton (1956) of 226 careers in a managerial hierarchy. The data indicate that there was no formal pattern of selection in terms of age at entry, rate of advancement, occupational experience, or type of educational training. The significant processes appeared to be informal, based on such criteria as religion, ethnic group membership, political beliefs, and participation in accepted organizations. Since approximately three quarters of the positions examined were at the level of foreman and production

superintendent, the reader may well ask if the application of particularistic criteria would not have been even more extensive had only non-production, white collar jobs been studied. Against this supposition, one must keep in mind that educational requirements would probably be more salient at this level.

Blauner (in Simpson and Simpson, 1964,pp.282-292) suggests that there are four major factors, one of which is clearly socio-cultural, which account for differences in occupational satisfaction. In addition to the socio-culturally determined occupational prestige, we also have control, integrated work groups, and the existence of occupational communities.

Several studies examine the culturally-based educational system as determinate of work outcomes. Slocum (1966,p.157) suggests that the disparity between the language of the poor and the language used by the teacher may tend to be a deterrent to social mobility. This would be particularly so when a given country has a lower-class language structure widely at variance with that of the middle classes, for example Great Britain.

Weil (1952,pp.68-71) suggests that industrialized countries build certain assumptions into their educational systems, the outcome of which is rootlessness for the lower level student. It is assumed that the working classes are too fatigued to learn. It is assumed that truth is stratified, and that upper stratum truth should be shared only with upper

stratum children. It is assumed that theoretically based material, for example geometry, cannot be translated into the average conditions of human labour. Finally, it is assumed that there should exist a social distance between the intellectuals and the workers. Weil asserts that to give up these assumptions is to provide an educational system which can provide roots through the general culture.

Crozier (1964, pp.238-239) suggests that the educational system of a given society both reflects its social system and acts as the main force perpetuating it. It is a powerful form of social control and a model of future social relationships. The main characteristic patterns of the French bureaucratic system are held by Crozier to be duplicated in the educational system - a highly centralized and impersonal organizational structure, extreme social distance between teacher and students, learning content which is abstract and divorced from actual life requirements, and finally, preparation of students more for entry into particular social strata than for future productive functions.

Slocum (1966) presents some data which bear on the American emphasis on occupational and social mobility. In a contrast between Americans and Europeans, he suggests that American "openness" and readiness to be hospitable, friendly, and accepting of others at face value have generated patterns of interpersonal relations which make mobility a less personally traumatizing experience for those who move from the cultural

milieu of one social class to another (pp.164-165). Notwithstanding this, it is still the case that movement from one's father's occupational level is largely patterned. Citing a study by Blau (ASR, August, 1965), it is reported that mobility patterns for the low status and high status are quite different. Sons of low status and high status are quite different. Sons of low status fathers tend to begin their work in an occupation with a status similar to that of their fathers, although many later obtain higher level occupations. On the other hand, those with fathers in high status occupations tend to begin their work lives in positions at levels considerably below those of their fathers, and tend to move upward during the course of their labour force participation (pp.168-169). Insofar as adult education is a contingency for occupational mobility, its use tends to reinforce existing patterns rather than unleash new mobility. Slocum cites a study by Johnson and Rivera (1965) in which it is reported that the typical adult education student is young, urban and fairly well educated, and that adults with relatively poor education and with low status occupations seldom aspire to participate in these programs unless they can see some immediate, tangible, advantage (p.197).

Socio-cultural factors are, according to Slocum, also largely responsible for the process of occupation choice-making. The opportunity structure is perceived through a screen of past experiences, past and present associations, and the values one has come to accept. There appears to be no structural mechanism in the society to make all types of occupational

information available to all levels of social system, nor is there any guarantee as to the meaningfulness of this information were it made generally available (1966,pp.200-201). It is for this reason, perhaps, that most of the available evidence points to occupational choice being situational in character, and to being closer to the choice of a particular employment than to the choice of an occupation (p.206).

We turn now to one of the best institutionalized of all the socio-cultural phenomena associated with work - the professions. Since one of the hallmarks of true professionalism is the public's acceptance of their own incapacity to judge competence, professional activity has to be properly seen as embedded in a matrix of cultural norms, supported by appropriate institutions. MacIver (in Vollmer and Mills, 1966) maintained that a key characteristic of professional groups was the degree to which they established autonomy and collective self-control over the standards of performance and behaviour. He pointed out that whereas it is characteristic of all social groups to develop ethics, norms or standards of behaviour governing the relationships of members with other members, professional groups are different in that they develop ethics and standards with regard to relations with those outside the group.

In a definitive article on professions, Goode (1957) raises some of the problem areas and some of the offsetting advantages created for a society which cedes its right to judge its professionals. Goode suggests

that society obtains indirect control by yielding direct control. Discipline is maintained by the professional community for fear of loss of prestige and of autonomy. Client choices, if uncontrolled, would affect survival and success. If professionals alone are competent to judge, ideals of service seem to be violated in not informing the public of professional evaluations. Such data are seldom available for the profession will not rank its members for society at large. Public ranking would transfer control to others, generally ruining those at the bottom. Each community would then have to offer excessive rewards for talented recruits to replenish the supply of professionals. Moreover, if a number of professions were simultaneously in need of replenishment, the community could not likely meet the demand.

Wilensky (1956, pp.234-236) deals with the inordinate influence of the union-employed lawyer, and accounts for it in terms of what society normally grants to this profession - the mystery of the law, the fiduciary and structurally confidential relationship, the position of the lawyer in the larger society - in addition to the pervasiveness of labour law.

Howard Becker (quoted in Slocum, 1966, pp.120-121) goes so far as to make public acknowledgement of professional status as the primary criterion of what occupation is and what occupation is not a profession. He suggests that professions are merely those occupations which have been fortunate enough to gain and maintain possession of that honorific title. It is therefore unnecessary to think of "true profession" or to attach to the

title any special set of work characteristics like theoretically based skill, fiduciary obligation to client, etc., etc. There are merely those work groups that are commonly regarded as professions, and those which are not.

Everett Hughes, perhaps the father of Becker's thought, points out that professionalization, thus conceived, serves as a mechanism not only for the mobility of certain individuals but for entire occupational groups. Professionalization is therefore an important ingredient in the "open society" but it also contributes to intergroup conflicts where ethnic or racial caste barriers restrain career mobilities for certain minority groups (1960).

Also writing in the Hughesian tradition are Strauss and Rainwater (1962, pp.213-214) who point out that the complaints and hostility of chemists are directed principally against the general public, which they feel denies them true professional recognition, as well as against those above them in the hierarchy of the work organization. A comparison of complaints directed against colleagues and against the external world shows more complaints to be directed against the external world. Strauss and Rainwater feel that the major thrust toward the chemists' appropriation of professional title and toward public recognition of the discipline as a profession comes from men who are located outside the college and university campuses, where the designation "scientist" is sufficiently understood and rewarded (pp.223-225). The more chemistry moves into the world of industry and commerce, where the meaning of the scientific designation gets

blunted, the more [illegible] claim to chemistry being a profession will be made (pp.228-229).

COMMUNITY

Some evidence is available which suggests relationships between conditions in the community and work-related behaviour. We shall cite some of this evidence.

Kerr and Siegel suggest that the most general explanation of differences in the interindustry propensity tc strike is the nature of the industrial environment. Particularly important is whether a given industrial environment will direct workers into masses or integrate them into the general community. They hypothesize that the most strike-prone industries are those in which the workers are not integrated into the general community, where they have formed an isolated mass, where there is a sense of mass grievance against society, and where there is little sense of community responsibility. The suggestion put forth by Kerr and Siegel is that in such a situation, the cost of striking is reduced, for there is more group support for the strike, and less <u>felt</u> public pressure against it. These strikes may have as much the element of small-scale revolt as they have objectively sought economic goals (in Kornhauser et al., 1954,pp.189-212).

Lipset suggests that size of community is highly correlated with leftist voting (1963,pp.262-267). In cases drawn from a number of countries, the proportion of left voting goes up as the size of the community

increases. However, in a finding consistent with the Kerr and Siegel material, left voting tends to be highest in isolated, small communities like those of miners, fishermen, and loggers.

Mack (1954) describes the spatial segregation of workers of Italian and Scandinavian descent in both a railway maintenance shop and in the community. The division of labour, assignment of tasks, and work arrangements along the lines of ethnic group membership had no basis in rationality, and violated business norms for efficient utilization of the labour force. Mack suggests that just as the segregation in living areas is functional at the community level in warding off possible conflict, so too is it functional at work. The work place can be conceived, then, as an exact analogue of the community's pattern of relationships between ethnic groups.

Hart (1949,pp.59-60) studies power relations in Windsor, Ontario. In the city of Windsor, Hart finds that there is no community as such; there are only various power groups in a fairly constant state of competition and, at times, open warfare. The four power groups identified are (1) big business, e.g. the automobile makers, (2) the Roman Catholic Church, (3) the union, and (4) local business group, or as Hart calls them, the Chamber of Commerce group. Since these four groups seem to include everyone in Windsor, there is no residual general public at large as there might be in other cities. Hart suggests that, in Windsor, it is the absence of this fifth group - a general public - that is so largely responsible

for the tensions and bitterness evident at the time of the study. The conflicts between the power groups tend to be naked and overt since there is no group of so-called neutral bystanders to mask them.

Goode, in an empirical study of librarians' claims to professional status, suggests that it is the apparent acceptance of their vulnerability to community control that is partially responsible for their not being professionals. Goode notes that it is the community which either accedes or not to an occupation's claim to professional status, and that high community rank is unlikely to be forthcoming for occupations which bow to censorship demands and have no professional code to promulgate over political expediency (in Vollmer and Mills, 1966). Vulnerability to the community definition of occupational role is also the theme of a study of teachers by Terrien (1955). The 100 teachers in his sample were highly conscious of the community definition of their role, and were not well enough structurally attached to the adult community to do much to change or improve the definition.

Finally, we may turn to a brief consideration of the relationships between community support and organizational decision-making. Gross (in Faris, 1964,p.639) suggests that what an organization can do is a function of what the community, or elements within it, wants done or can be persuaded to support. Goal setting, to the extent that it impinges on the boundary between the community and the organization, becomes a dynamic problem

which raises questions about both organizational strategy and organizational legitimacy. Thompson and McEwen (1958) review the problem of strategy. The environment exercises control over goals through processes of competition and for cooperation. Competition implies that a third party is involved in the resolution of the issue, for example, whether it patronizes a given organization or its rival. Cooperation involves different processes each of which implies a different amount of organizational autonomy being ceded away. Bargaining, because it is specific and most limited in goals, necessitates the smallest organizational concession. Co-opting (see Selznick, 1949) implies more, and coalition implies the most. To be successful, the organization must find which of these means is to be used in any given instance. Like Thompson and McEwan, Etzioni (1961,pp.85-87) sees the environment as affecting the choice and salience of organizational goals, and the range and type of power-means which the organization may use to achieve them. When goals and compliance structures are not congruent, Etzioni holds that it is due to environmental pressure on the choice of goal, or on the means used to attain it. If the organization was not constrained by its environment, its goals and compliance structures would be in line. Having them out of line reduces organizational effectiveness, thereby giving rise to pressures to bring them into line. Bringing goals and the compliance structures into line involves moving the goals, or the compliance structures, or the constraining forces in the community.

V INTRAPERSONAL FACTORS

In this section we shall review what the literature reports on the effects of intrapersonal factors on work-related behaviour. We should recall that it is our intention here to cover not only the social psychological variations that serve as determinants, but antecedent life experiences as well. The material has been roughly divided into sections on formal socialization experiences, personality factors (insofar as sociologists report them), aspects of life history, personal orientations to work roles, aspirations, levels and types of commitment to types of work and to work organizations, congruities and incongruities between personal expectations and work realities, and adaptive mechanisms. The focus will be to treat each major category as including the independent variables of interest.

SOCIALIZATION

The general problem here is to describe the process whereby the individual is taught to participate in a formal work role (an occupation) as the major means of meeting his, and his family's, subsistence needs. Parsons and Smelser (1956, pp.121-123) provide the best abstract statement on the process, seeing occupational socialization as proceeding through a series of stages, each linked to the appropriate institutions, which takes the individual from the most general to the most specific state of preparedness. In their paradigm, it is the family which provides the primary-socialized motivation, the school which is most responsible for generalized performance

capacity and trained capacity, and the firm which provides the specific preparation required for utilization in assigned task performance. Different institutions are therefore important at different stages of the process.

The role of the school as a socializing agency for work organizations has received a great deal of attention. However, few concrete connections have been found to exist between the content of school training and the content of required work performance. Anderson (personal communication, April, 1967) reports that the most obvious connection is that between the amount of education and the level of occupational employment. Slocum (1966,p.146) similarly remarks that employers place more weight on the possession of academic certificates than on the content of the education acquired in their attainment. Wilensky (personal communications, May, 1967) corroborates this, feeling that what the employers want is discipline, responsibility, and reliability, and that they regard the education system as best ensuring that these factors are built into the student. The important corollary is that employers assume that the longer one's participation in formal education, the more likely it is that one will be disciplined, reliable, and responsible.

There are others, however, who, while they do not regard educational content as being of great importance to employers, still see important similarities between the organization of the school and the organization of the work place. Slocum (1966,pp.15,146) believes that the

student role is essentially of the same quality and type as the worker role, and that therefore the student automatically learns to be a worker (given productivity in exchange for given rewards) merely by playing the student role. Slocum also cites Turner (in Halsey, Floud and Anderson, 1961) who treats the competition for grades and academic achievement - "contest mobility" - as being realistic preparation for the merit system of earning rewards in work life (1966,p.145).

Insofar as participation in school is determinant of aspiration levels, it is also related to occupational choice. Slocum (1966,pp.221-222) cites evidence by Burchinal (1962) and by Ellis and Lane (1963) to demonstrate some of the links. Burchinal finds that the students' expectations of success and the generation of aspiration levels derive in part from their perceptions of teachers' evaluations. Ellis and Lane found that for undergraduates from low socio-economic backgrounds, high school teachers were highly influential in the decision to attend university; 85% of the sample, chosen at Stanford University, made this evaluation, and 33% reported their high school teachers as having been the most influential persons. Slocum reports that his own research has indicated that students with high grades and high activity levels in extracurricular activities generally have higher levels of educational and occupational aspiration. Numerous connections have also been established between the nature of the school training and preparedness to perform a given type of work. This is most obviously the case in most technical, scientific, and/or professional occupations. Despite the

self-evidence of this assertion, there are reports of how objective variations in occupationally linked educational programs produce significant variations in the ability to perform the work involved. In the case of lawyers, for example, Smigel (1964,pp.252-255) reports on the functional importance of work on the Law Review for those working in Wall Street law offices, the essential nature of the work being the same in both settings. Similarly, Lortie (1959) reports that different types of law schools launch their graduates into different types of practice for which they are, by virtue of their training, best prepared. University-affiliated schools best suit their graduates for legal firms whereas independent schools prepare their graduates more adequately for independent practice. This has been substantiated by Carlin (1966) whose "sole practitioners" were almost exclusively the products of independent law schools, frequently night schools. Lortie suggests that the congruity between type of school and type of practice comes about in the continuity of the teacher role with employer roles: the legal firm partner often plays the same role vis-a-vis new employees as did the teachers; while the teachers in the independent schools, themselves engaged in private practice, emphasized the "tricks of the trade" to their students.

We have already made brief reference to the connection between the amount of education attained and the level of labour force participation allowed the workers. Slocum (1966,p.183) sums up the available

literature, stating that only those with a college education have high prospects of an orderly work history, but in this assessment he appears to underestimate the orderliness afforded by crafts training. Stinchecombe (1959,pp.68-69), in a study of a craft-organized industry, finds that technical occupational socialization, when it is accompanied by publicly recognized work competence,induces internalized work standards and procedures, and results in a professionalized work status for the craftsmen.

In his study of the American military, Janowitz (1960) finds that for the career officer, the important determinants of the shape of one's career are attendance at a military academy, modal academic performance accompanied by high athletic achievement, plus intermittent interruptions of active duty for post-graduate educational training at the higher military colleges. Janowitz provides excellent data on the socializational process of the military academy, which builds the culture of the military into the personality organization of the cadet, provides him with a continuing source of peer contact, and, most obviously, gives him the necessary military expertise. Dornbusch (1955) corroborates the data on military academics, also adding material on how the Coast Guard Academy,representing a non-combatant service, inculcates its cadets with a more bureaucratic orientation than do the other, more militant, service academies.

In the "high-commitment" occupations - for example the professions, the military, and the church - there is an extensive literature

on the socialization process. Until very recently, the traditional sociological approach has been to assume a "stripping process",a replacement of the old, non-occupationally valid, self-image with a new one. In other words, the specific socialization outcome in these high-commitment occupations was thought to be a fundamental transformation of self. This assumption is now questioned by Becker et al. (1961), with the discovery that the adoption by medical students of short-run, situationally-relevant perspectives was more typical than a radical transformation of self. The implication, which requires more extensive investigation, is that even in the high-commitment occupations the important socialization outcome is the ability to make short-run situational adaptations in response to various objective contingencies. There is a close analogy between this view and the work of Riesman, Glazer, and Denney (1950) and of Dalton (1959).

PERSONALITY

While our coverage here is by no means complete, we do intend to review four different treatments of personality as causative factors in work-related behaviour. Our major subdivisions are personality needs, personality types, intrapersonal organization and personality's function as a screen for perceptions and decision-making.

Personality Needs

Much of the work based upon personality needs tends to be presumptive in character, often not demonstrating in an acceptable fashion that what is assumed to be needed is so in fact. This shortcoming, plus

the fact that it is usually most evident in work of a programmatic nature, often leaves the findings open to the criticism of ideological bias. Notwithstanding these cautions, there is an extensive literature which accounts for worker reactions to, and behaviour in, the work place by means of to what extent, and in what ways, the work organization responds to basic personality needs.

One such presumed need is the need for self-actualization, a term introduced by Maslow and extensively used by Argyris (1957). The theory postulates that the individual's maturation process from infancy to adulthood brings him from a state of dependency on others to independence; from passivity to self-initiative; from possessing a limited set of responses to having a wide repertoire of possible responses; from having shallow, casual and erratic interests to having deeper interests; from having a short time perspective to a long one; from subordination to others to superordination over and/or equality with others; and from unawareness of self to self-awareness and self-control. If any work organization places the adult individual in a situation where he is once again dependent, subordinate, submissive, and unable to be self-activating, then the worker is denied the ability to make full use of his status as an adult. Since it is in the nature of most work organizations to be formally organized, directively led, and managerially controlled, the amount of self-actualization permitted is thought to be below the level sought, and indeed required, and negative

consequences - absenteeism, turnover, worker defensiveness and apathy, negatively-orientated work groups, etc. - will accrue. Moreover, the degree to which the individual worker cannot be self-actualizing is thought to increase as one goes down the organizational chain of command with the lower ranks and as the organization takes on more aspects of mass production (Argyris, in Bell, 1967, pp.208-210).

This approach - called by its critics the personality vs. organization school - has been roundly criticized by Gross (1965, pp.138-146) whose conclusions are as follows: firstly, Gross believes the theory to overemphasize the tyranny of the large organization, noting that controls are implicit in all of social life and are most extensive not in the specific contractual element of the work organization but rather in the small diffuse groups represented by family, friends, and community webs of participation. By contrast, organizational rules reduce the tyranny by delimiting specific areas of their application, and specific standards of performance beyond which claims for further involvement cannot be made. Secondly, Gross suggests that the organizational limitations on personal freedom and autonomy are exaggerated because of incorrect historical comparisons which, for example, compare the "best" of the medieval period with the "worst" of our own. Third, Gross points out that the theory starts where it ought to finish, that is, that the need for self-actualization has never been empirically established. Moreover, the theorists' idealization of the types of jobs

which are thought to produce the most self-actualization tend to have empirically produced what Gross describes as the worst "mental health bets" - anxiety-ridden executives, professionals and creative persons. Fourth, Gross asks why one should assume, even if self-actualization is important, that it is sought in work rather than in family and community life. Fifth, Gross states that the theory underemphasized economic rewards and treats them as almost irrelevant. Finally, Gross assesses self-actualization theory as a disguised democratic ideology which is justified on the grounds of supposed, but never demonstrated, greater efficiency.

In light of this devasting attack, it is interesting and important, that Argyris (in Bell, 1967, pp.208-217) himself cannot demonstrate that there are differences in the self-actualization needs of high skill and low skill employees in a plant which he investigated, despite the profound and significant differences found between these workers on reported work satisfaction and on individual predispositions to rewards in the work situation. Both groups of workers sought to maintain shallow and superficial relationships with the employing organization, defining the desirable relationship between the company and themselves as purely contractual. In order of importance to these employees was wages, job security, job control, non-involvement, and togetherness - a far cry from the list of needs predicted by the theory.

A second presumed need is the "need for roots" discussed by Simone Weil (1952). Based in large part on the alienating consequences of her own employment in an assembly-line automobile plant, Weil locates uprootedness in the very organization of a large-scale, capitalistic, industrialized society in which the worker has reduced authority, limited discretion and autonomy, non-ownership of his tools, earning power only on the basis of productivity and a means-oriented education. Weil's solution, however philosophically pleasing it may be to some, is nothing less than the complete transformation of the educational and economic sub-systems of the society. Notwithstanding the generality of Weil's claims, and the revolutionary nature of her solutions, it should be recalled (from the section on technology) that worker satisfaction was found to vary with amounts of discretion, autonomy, and self-direction. Whether we are justified in claiming these to be "needs" is, however, another question.

The need for self-esteem tends to be generally accepted by sociologists as an orienting mechanism for human behaviour. Like some of the other "needs" discussed, its empirical presence is not unquestionably established but more research mileage appears to have been derived from this assumption than from those previously discussed. Since self-esteem is largely a by-product of the esteem received from other parties, most of the literature on group influences, conformity, informal sanctions, etc., tends to be based on the need for self-esteem. Rushing (1964) treats self-esteem

as a major motivational force in the behaviour of the para-medical professionals employed in a psychiatric hospital. Strauss and Rainwater (1962,p.170-171), in their study of chemists, discuss the need for self-esteem as determinant of the type of reaction the chemist will have to the organizational definition of his employment. In a setting such as the university or basic research establishment, the acceptance and encouragement of basic research allows the chemist to meet his needs for self-esteem through the maintenance of a "scientist" identification. In an industrial or governmental setting, the concentration on applied research, and the evaluative criterion of profit-making or goal-achievement, causes the chemist to assuage his needs for self-esteem by moving to a self-identification of "professional". Westley (1953) in a study of the police, explains their use of violence as an illegal means to achieve the high status which is otherwise denied them. Their needs for self-esteem are particularly important in accounting for their brutality to marginal criminals of lower status - sex deviants and minor felons - since it coerces respect and improves their enforcement record for the public at large. Slocum (1966,pp.214-215) reports two studies which find close associations between intellectual self-concept and occupational aspiration levels. He states that Herriot (Harvard Educational Review, Vol. 33, No. 2) and Brookover (1965) found that the higher the self-appraisal of intellectual ability, the higher the level of occupational aspiration.

The last presumed personality need to be considered is the need for internal self-consistency. March and Simon (1958, pp.93-95) offer several hypotheses which use this need to determine satisfaction levels, and ultimately whether or not a given job will be maintained. They state that the greater the conformity of the job characteristics to the self-characterization held by the individual, the higher the level of satisfaction; and that the greater the compatibility of work requirements with the requirements of other roles, the higher the level of satisfaction. Level of satisfaction is one of the several factors used to determine whether one will leave one's job or stay. The presumed need for self-consistency is also the concept which underlies Lenski's status crystallization argument, the voting-for-change pattern being treated as the political expression of the need to reconstruct the social order so that one's rights and privileges will be in line (1954).

Personality Types

The work in this area which we report deals largely with self-selection into occupations and work organizations which are imagined to be consistent with certain personality types. Our coverage in this area is far from complete and is meant only to suggest, and briefly illustrate, this line of reasoning.

Roe (1952) conducted a study of eminent scientists and found consistent relationships between personality pattern and occupational self-selection. Scientists generally came from home backgrounds which

emphasized the importance of learning for its own sake, and which tended to place the children on their own resources. There was therefore a personality pattern organized around the major themes of objectivity and independence. Among scientists, Roe reported that biologists had an orientation which strongly emphasized reliance on external controls; physicists were often anxious and both disinterested and unskilled in interpersonal relations. She reported, as well, that social scientists manifested deep concern about human relations, and were troubled by them. One of the difficulties with this type of argument is that the descriptions of personality types tend to be so broad and general that it is difficult to assess whether the reported patterns were causative of occupational selection or the results of successful socialization into the occupation. In this regard, one recalls that Rosenberg (1957) found that once university students had chosen their occupational fields they began to manifest the appropriate values through anticipatory socialization.

Etzioni (1961, p.295) suggests that just as organizations vary in their compliance structures - some being based on moral involvement, some on calculative involvement, and others on coercion - so too do individuals vary in their personality predispositions to these compliance structures. Self-selection, augmented by techniques of organizational screening, produces an imperfect, yet effective, fit between the compliance structure in the position and the organization, and the personality patterns of the incumbents. Unfortunately, Etzioni offers no data to substantiate this

claim, but he offers the hypothesis that among executives successful "mobility from company to company, from job to job, depends upon staying with the same compliance specialty rather than work with the same type of manufacturing techniques" (p.296). Implicit in this line of reasoning is the assumption that the personality organization around compliance tends to be so stable that facile adaptation to a new structure is not to be expected. The empirical evidence provided by Dalton (1959), Becker et al. (1961), and Strauss et al. (1964) would appear to belie this assumption, since all these case studies point to a wide range of adaptive behaviour, whatever the personality type.

Intrapersonal Organization

Roethlisberger and Dickson (1939) made much of this factor as a determinant of work-related behaviour and of reactions to various aspects of the work organizations. Their study is replete with reports of the worker whose unhappiness was caused by such factors as having been reminded of an authoritarian father by one's immediate supervisor, or conflict and tension at home, etc. The Mayo school has tended to pay a great deal of attention to this level of analysis, and the notion of anomie was introduced into the work setting. Whyte's "crying waitress" is an example of the employee's inability to accommodate herself to the strains inherent in her work, the tension level being so high that she has no recourse but temporary withdrawal and a convulsion of tears (1948).

Hart (1949,pp.55-56,72) offers a critique of this approach, attacking it not so much because it is thought to be untrue, but rather because it deflects attention from the other variables of presumed greater importance. Hart suggests that the approach is too interlarded with individual analysis to pay adequate attention to social disorganization and reorganization. Furthermore, it tends to reserve all solutions for managerial action, ignoring the socially supportive functions of individual adaptation, informal work groups, and labour unions. Finally, the focus on individual psychology and on anecdotal life histories deflects one's concern with the social nature of the work place.

Personality as a Perceptual and Cognitive Screen

While it is generally acknowledged that man's perceptions, evaluations, and cognition are filtered through the screen of personality, not many students of work and work behaviour make important use of this conceptualization in their work. Herbert Simon tends to be a major exception, placing almost all of his work within this framework. Simon tends to adopt a Skinnerian view of psychology, and keeps manifest how the individual personality deals with the perceived alternatives presented to him by any work-evoked stimulus. This view, when added to the organizationally provided need for rationality, tends to lead Simon to some rather naive conclusions. For example, he states that:

> Two persons, given the same skills, the same objectives, the same knowledge and information

> can rationally decide only upon the same course of action. Hence administrative theory must be interested in the factors that will determine with which skills, values, and knowledge the organization member undertakes his work (1952,p.54).

Even if one grants Simon his initial assumption that identical skills, objectives, knowledge and information, when added to an identical view of rationality, will produce identical decisions - itself an undemonstrated assertion - the naivety implicit in the expectation that these data are readily available to the organization is astounding.

In a later work (March and Simon, 1958,p.53,93-95) some greater specification of how personality functions as a screen is provided. For example, the worker's motivation to produce is seen as a function of the characteristics of the evoked set of alternatives, their perceived consequences and the individual's goals (p.53). Similarly, an individual worker's propensity to leave his employment is seen as a function of the state of balance between inducement utilities (rewards) and contribution utilities (costs) which balance is itself a function of, among other factors, the perceived desirability of leaving, and the perceived ease of movement (p.93). While this level of argument is plausible and difficult to dispute, it is equally difficult to empirically demonstrate, and in this regard it must be noted that Simon's major contribution has been theoretical, not empirical.

With this brief foray into the literature on personality variables as determinants of work-related behaviour, we now move into the next major subcategory of intrapersonal factors.

LIFE HISTORY

Full attention to this topic would result in a lengthy and excessively documented separate report. We therefore accept as having been adequately demonstrated the proposition that ascriptive factors in one's life history - age, sex, ethnicity, race, religion, affiliations, etc. - operate as determinants of aspiration levels, acceptability into certain occupational levels, and career mobility. Illustrative examples may be found in Hughes and Hughes (1952), Dalton (1959), Hall (1948), Smigel (1964) and myriad others.

Our concentration will be on the importance of the first job as a determinant of subsequent work life. Slocum reports the following studies (1966, pp.176-183).

In a study of the labour force of Oakland, California, Lipset and Bendix (1959) found a considerable amount of occupational mobility. While most job changes were found to be among jobs at the same status level, there were many shifts, mostly temporary, across the blue/white collar line. The important finding was that the first job tended to be a good predictor of future occupational mobility. Family socio-economic background, if low, tended to depress mobility, and to support it if high.

A Detroit study by Wilensky (1963) found that the level of the first job was highly associated with the orderliness or disorderliness of the work history. Most of his sample of lower-middle and working class men had disorderly work histories, but to the extent that orderly work careers were found, they were related to a start in the higher occupational strata. Miller and Form (1951) also report that job instability was most frequently found among unskilled workers, semi-skilled factory operatives, and those in domestic and personal service work. Like the Lipset and Bendix finding, workers were found to generally stay at the same occupational level as the first job entered.

In a study of occupational changes among professionals, Reiss (1955) found that those in the established professions tended to change the least, with more change reported for those in the semi-professions and "would-be" professions manifested the greatest amount of occupational change.

The conclusions we may draw are as follows: Of the very great number of job changes that occur at any point of time, most represent lateral movement in status. Mobility, where it does occur, tends to be most highly associated with the possession of positively valued ascriptive characteristics, higher amounts of education, and commencement of one's work life at a higher, rather than a lower, status level. As Becker and Strauss suggest, one's education and last work experience tend to become

regarded by prospective employers as ascriptive characteristics and appear to determine whether the attained jobs will represent short or long career escalators (1956).

ROLE ORIENTATIONS

In what respects are the orientations toward particular work roles determinate of the ways in which one's work life enfolds and of reactions to work? We shall, in this section, cite several of the studies which attempt to provide answers to this question.

The first distinction of any importance may be whether one is oriented to work as merely a set of activities by which subsistence needs are met, or as a career. Dubin (1958,p.276) defines a career as a succession of related jobs, held in ordered series, with some kind of relationship between them. This is the commonly accepted view of the career, the essential elements of which appear to be sequential continuity and organic unity between the jobs held in one's lifetime. Some (for example, Slocum, 1966) treat the career as having an upward mobility referent so that the ordered sequence implies better positions following poorer ones. Hughes and his students have, on the other hand, tended to avoid a necessary attachment to the notion of upward mobility. The characteristically Hughesian example offered is the career of the prostitute whose best prospects are present at the beginning of the career before health and beauty dissipate. Dubin suggests that when one is oriented to view work life as organized around a career, the

individual has expectations of the future, a lengthy time perspective, and a degree of predictability of one's future employment. And he adds that the more one's work life actually approximates a career, the more predictability of the future is ensured (1958, p.279).

Rosenberg (1957) concluded that members of his nationwide sample of college students were oriented toward work as a career, and not to work as mere subsistence-providing. This is consistent with the generally held finding that the higher the level of education, the more one's work life approximates a career. Rosenberg reports that an orientation to work as a career carries with it concomitant orientations to work as having to provide self-fulfillment, interpersonal satisfaction and security. Rosenberg feels that his most significant finding is the relationship found to exist between the student's value orientations and his occupational choice. Generally, students with an orientation toward helping people chose the liberal professions, students oriented toward extrinsic reward sought careers in financial-commercial fields, and those oriented toward self-expression those occupations in the creative field.

Gross (in Faris, 1964, pp.669-670) reviews the literature on employed professionals. He examines the traditional view that professional and bureaucratic orientations are thought to be antithetical and concludes that they have points in common as well as in opposition. Both professional and bureaucratic orientations to work are characterized by universalistic

standards, specificity of function, affective neutrality, and performance criteria for evaluation of competence. They differ in the respect that while the bureaucratic orientation is thought to be devoted to an increase in the self interest of the employing organization, the professional orientation is toward the needs of the client. The second point of difference is that the bureaucratic orientation is toward hierarchically organized authority and decision-making whereas the professional is oriented toward colleagial authority and equalitarian decision-making. However, there are several challenges to these points. Hughes (1960) pointed out that it is often the employing organization that is transformed, that it may accommodate to professional norms rather than forcing the professional to accommodate. This is most obviously the case for those professionals possessing highly marketable skills in a situation of short supply. Etzioni (1961) has raised questions about the supposed colleagial nature of professional authority relations, suggesting that while technically professionals are peers, the effective authority structure is also hierarchically organized. Notwithstanding these cautions to viewing the professional as antithetically oriented to the bureaucracy, it is still a fact that increasing numbers of professionals are accepting employment in large organizations, and that many of the imagined strains and tensions are handled at the contractual level.

Research by Reissman, who studies professionals employed by the U.S. civil service, suggests that it is an error to regard either professional or bureaucratic orientations as unitary. He finds that there are four main types

of role conceptions in his sample, representing various admixtures of each orientation. The functional bureaucrat is the most professionalized, who may be portrayed as a professional who "just happens to be working for the government". His reference group is not within the bureaucracy but his colleagues outside. His associations at work are distant and formal. He accepts bureaucratic rules as the limits within which he feels free to operate professionally. He feels no conflict between his professional ethics and his job because only the former exist for him. The specialist bureaucrat resembles the functional bureaucrat in professional orientation but is far more aware and mindful of the bureaucracy. To the degree that he seeks departmental recognition and the approval of those he works for, he identifies more with the bureaucracy than with the profession. His orientation is one of ambivalence, feeling a kinship with other professionals in his field, and yet feeling unlike them by the virtue of his organizational attachment. He would like professional recognition but works for organizational rewards instead. The service bureaucrat is also somewhat ambivalent in his role orientation. He is oriented in terms of the bureaucratic structure but seeks recognition from the client group outside of it. He entered the civil service primarily to realize personally-held goals centred about the rendering of service to a certain group, and he uses the bureaucracy as the facilitating framework through which he can achieve his goals. Finally, the job bureaucrat is immersed entirely within the bureaucratic structure. Professional skill provided the necessary entrance qualifications and determines the nature of

the work to be done. Recognition is sought solely from the organization, not from the profession. The sought rewards are those provided by the organization, and the organizational goals are accepted as legitimate avenues to their attainment. His orientation is to the work rules and the ends to be served (1949, pp.208-210).

Wilensky's description of the role orientations of experts employed by labour unions is analogous (1956). The underlying value orientation of the expert predisposes him to hold a particular orientation to his job. Those who are oriented primarily to uplift and social reconstruction are the Missionaries, those oriented to their professional skills are the Professional Service Experts, those oriented to self-advancement above all else are Careerists, and those who are oriented to union politics as intrinsically satisfying irrespective of program content are the Politicos. Each of these major orientations may be more finely subdivided, and Wilensky identifies eight types of role orientations (pp.112-113). Having made this distinction, Wilensky suggests that to the extent to which one's internalized group standards conflict with those of the organization, the expert will be susceptible to felt role conflict (pp.112-113). The Professional Service Experts are most susceptible to this strain in missionary or dishonest unions; the Missionaries are most subject to role conflict in bureaucratized unions (pp.129-134). Wilensky finds that the stability of the original role orientation varies inversely with the amount of role conflict experienced. The

most stable types were those with a means-centred outlook since this was the most prevalent characteristic of the unions studied. When a shift in role orientation occurs, it is always in the direction of means-centred outlooks (pp.172-174). Finally, the Politicos and one type of Missionary tended to be the most influential experts since the former are objectively useful and the latter represent the idealized sentiments and attachments of the leaders. The Legislative-Liberal Missionary's influence is also a function of the as yet still low degree of bureaucratization in most unions (pp.196-208).

Finally, Strauss and Rainwater (1962,pp.167-168) report that chemists who are oriented toward basic research tend to self-select themselves into appropriate work settings as do those who are oriented to applied research. But since the self-selection does not operate perfectly, there are variations in attitudes toward experienced autonomy that are highly associated with variations in role orientation. The least resentful about the degree of autonomy granted them by research administrators are bench chemists, research administrators, chemical engineers, and non-research administrators while the most resentful are the Ph.D's and those non-Ph.D's who do basic research.

ASPIRATIONS

We cite several studies which use personal aspirations as explanatory variables in accounting for worker behaviour and attitudes.

Chinoy (1955), in a now classical study of American automobile workers, finds that they either have low levels of aspiration, or that if they do aspire to upward mobility and success, they have poor opportunities to realize them in the automobile plant or in some small-scale entrepreneurial activity. The low aspirations, where they are found to be present, result from what Chinoy calls the "immediate gratification syndrome" the unwillingness to forego advantages in the present while preparing (for example, through education) for mobility opportunities. The unmet aspirations, on the other hand, cause the workers to deflect the arena of hoped-for success from the occupational to the consumption and security spheres. Once they become aware that they will not progress occupationally they aspire to the physical manifestations of a high standard of living and to an economically secure retirement.

Wilensky and Edwards (1959) consider the "skidder", the person who is downwardly mobile in his occupational life. They discover, to their admitted surprise, that most skidders, particularly the older workers who have moved downward in their own life-times, maintain continued mobility aspirations and deny failure. The Wilensky and Edwards' explanation is that mobility aspirations were so firmly implanted through early socialization that they cannot be given up even in the face of externally objective evidence of non-success.

Carlin (1962,p.200) accounts for the low satisfaction levels of independent lawyers by the lack of fit between their aspiration levels and the objectively low status of their practice. Despite attempts to rationalize the situation, they admit to low satisfaction. Contingent variables in determining the level of dissatisfaction were the level of the practice, the field of specialization and the level of income. By level and specialization, the most dissatisfied were the low level real estate and business-corporate practitioners. For lawyers specialized in personal injury and general practice, there was only a 3% difference favouring lower level in the reported dissatisfaction. The data also indicated a direct relationship between income and satisfaction. Carlin holds,however, that these differences represent relative differences among a group who are generally absolutely dissatisfied with their low status vis-a-vis their high aspirations.

Slocum (1966,pp.194-195) hypothesizes that it is in the nature of the pyramidal structure of most business hierarchies that high occupational aspirations cannot long be realistically sustained. Since only relatively few can be promoted, and those tending to be those who have always been successful, the others tend to revise their expectations downward.

Dunkelberger found in a study of male household heads in low income areas of the rural South that high aspirations were not necessarily matched by high expectations. The men in his sample tended to have high

aspirations but low expectations, and they, like many of the automobile workers studied by Chinoy (1955), shifted their aspirations to the occupational mobility of their children. Nearly all these fathers aspired to high status-level occupations for their sons (cited in Slocum, 1966,p.195).

Slocum also reports that Presthus offers a classification by career aspirations (The Organizational Society, 1965). The upward mobiles have high aspirations. The indifferents have given up hope of advancement and now settle for security and extra-vocational satisfactions (compare Chinoy, 1955). The ambivalents are intellectually able but interpersonally poor, often critical of the employing organization but still wanting recognition from it. Slocum reports that no supporting data was offered (1966,p.196).

LEVEL OF COMMITMENT

We may approximately define commitment as the extent to which one invests oneself in a given occupational title, task, or organizational involvement. High commitment would be characterized by a firm value choice plus a disinclination to change it for other available alternatives. Thus conceived, commitment may be thought of as determinate of occupational choice, propensity to be loyal to a given employing organization, extent to which occupational effort is expended, propensity to change one's occupation, etc. We will cite several studies which either implicitly or explicitly make use of the concept.

Slocum (1966,p.190) cites a nationwide study of 40,000 American high school students conducted by Flanagan (1964) in which it is revealed that 75% of the high school juniors who had two years previously indicated an occupational objective had subsequently changed their choice. Slocum's conclusion is that occupational plans by adolescents may be safely regarded only as indications of interest rather than as declarations of intent. That is, lacking anchorage in an occupational commitment, the early choices were subject to radical change.

Slocum (1966,pp.208-209) goes on to criticize the theory of a rationally-based choice process suggested by Eli Ginzberg and his associates. Ginzberg's theory describes the hypothesized development phases through which occupational commitment is built, taking account of such factors as interests, capacities, aptitudes and a growing objective awareness of the external occupational opportunity structures. Slocum, on the other hand, believes that most choices are either non-rational, or lie closer to the non-rational than to the rational end of the continuum, the problem being that it is rarely the case that sufficient self-knowledge, knowledge of the work world, and commitment coalesce into a rational decision. This conclusion is based on research (not cited) conducted with high school and college students, and tends to be consistent with the material on adult work histories which stresses their random and undirected nature. Notwithstanding the non-rational and largely uncommitted nature of occupational choice for the

majority of workers, Slocum reports, citing Herzberg (1957), that adult workers tend to become emotionally involved in whatever occupation they happen to be working at. The data reveal that high proportions of workers prefer their current occupations and neither aspire nor expect to rise to a higher-level occupation.

Gusfield (1961) in a study of work histories found several distinctive patterns. One pattern, the undirected, was characterized by frequent job changes and occupational impermanence. The unestablished pattern showed no record of stability whatever, for example the casual labourer. The disestablished pattern included those who once had a stable occupation, and left it. Gusfield found two patterns by which stable careers were established. The immediate establishment pattern was characterized by early commitment and no later changes. The gradual development pattern was characterized by experimentation and shifting about early in the work life, but no changes after an occupational commitment was finally made (reported in Slocum, 1966, pp.176-180).

Strauss and Rainwater (1962, pp.59-60) report on the modal pattern for the choice of chemistry as an occupation. One gets a strong sense of drift from their description of the process. The choice is made almost by default. In the absence of other strong vocational interests, doing well in the subject, liking one's chemistry teachers, and parental acquiescence seems to draw the person along into the occupation. The commitment to the occupation tends to be the result of the process rather than a force directing it.

Stinchecombe (1959,pp.68-69) and Barber (1963,p.672) characterize craft and professional occupations respectively as enjoying a high degree of commitment from their incumbents. In some measure, it is the extent of commitment that is responsible for the internalization of work standards, values, and procedures, which in turn is rewarded by a "professional" work status.

In his typology of organizations as coercive, utilitarian, or normative, Etzioni (1961) suggests that it is in the normative organization that the participant is most likely to make a moral commitment. In his scheme, most work organizations would be characterized by a calculative type of involvement on the part of the lower-level workers. Even in normative organizations, charismatic leaders are required for those positions in which decisions about ends are made or from which expressive performances are controlled, since charisma heightens the extent of the moral commitment (p.211). Later, Etzioni suggests that positions of this type in utilitarian organizations - that is, most work organizations - also require charismatic leadership to maintain some degree of moral compliance from the subordinates.

Finally, Gouldner (1957,1958) uses the direction of commitment to differentiate "locals" from "cosmopolitans". Locals are those who are strongly committed to the employing organization at the expense of lower level commitments to their specialized role skills and professional reference groups. Cosmopolitans, on the other hand, have lower level commitments to

the employing organization, high commitments to their specialized role skills and their professional reference groups. Generally, the locals tend to be committed to loyalty while the cosmopolitans are committed to expertise. In this connection, Bennis et al. (1958) in a study of nurses, modifies the Gouldner proposition as follows. Commitment to professional skill produces low commitment to the employing organization only if the employing organization offers comparatively more limited professional opportunities than others (cited in Gross, 1965,p.105).

CONGRUENCE OF EXPECTATIONS AND REALITY

Logic suggests that it is easier to accomodate oneself to an objective situation which is congruent with one's expectations than to one which is not. The degree to which expectations are matched by reality should, therefore, be somewhat determinate of how reality is dealt with perceptually, cognitively, attitudinally and behaviourally. We shall examine some of the literature which addresses itself to this point.

While most of our reports deal with individual responses, we may begin with Etzioni (1961,p.146) who discusses an organizational outcome. Simply put, "the amount of socialization required by organization depends ... on the degree to which organizational behaviour differs from the behaviour the participants have learned elsewhere". Wheeler (Brim and Wheeler, 1966) makes the identical point in his consideration of organizations specialized in adult socialization. The essential feature of the argument

hinges on the lack of congruence between the organizationally - required behaviour and the expectations of the participants.

A variety of individual outcomes are described in these circumstances. Becker and Geer (1958) study the fate of idealism among medical students for whom organizationally required cynical responses are out of line with their originally idealistic expectations. Surprisingly the lack of congruence leads not to a radical revision of idealistic expectations but simply to their postponement. Getzels and Guba (1955), in a study of elementary and high school teachers in both rural and urban settings, found a strong relationship between the extent to which the school and its environing community met teacher expectations for their occupational role and felt role conflict. Teachers whose personal characteristics (age, sex, and marital status) made it most likely that they were career teachers were most liable to role conflict when their expectations and reality were incongruent. Wilensky (1956, pp.196-208) relates the congruence between the expectations of labour union experts with varied role orientations and the needs of the unions, to the objective chances of career success for the experts. Dalton (1959, pp.161-164) finds that nearly identical situational responses are required for success by the well-rounded university student and the mobile manager, and that university attendance is therefore productive of a set of expectations and skills which are congruent with the organizational reality.

Finally, the process of self-selection is often used to ensure congruence between expectations and reality. Strauss and Rainwater (1962, pp.167-168) find that it is the chemists who are most ready to accommodate to profit-making or practical criteria that most usually accept industrial or governmental employment, and those who are least able to accept these criteria that work in universities and basic research settings. Etzioni (1961, pp.212,213) suggests that self-selection ensures congruence for specialists and segmentalists who choose instrumentally-oriented and/or means-centred jobs, and for generalists who choose expressively-oriented and/or ends-centred positions.

In summary, congruence of expectations and organizational reality is thought to be determinate of reduced needs for organizational socialization, higher levels of ability to do the given work, and less felt role conflict. In training situations, the lack of congruence need not permanently alter the original expectations. Self-selection (and, of course, organizational recruitment) heighten the possibility that there will be congruence.

ADAPTATION TO THE WORK SITUATION

Much of the material already reported could have been treated under this heading, and will not here be repeated. We shall, however, cite several additional works.

Merton (in Nosow and Form, 1962) in a theoretical essay discussed the consequence of complete adaptation to the bureaucratic work situation. In Merton's view, since the essence of bureaucracy is discipline, devotion to duty, bounded authority and competence, and routinization, strong sentiments grow up around the organizationally-designed means for achieving its goals. This has the effect of psychologically transforming the means by which goals are realized into ends in themselves. This then gives rise to rigidities in meeting unexpected contingencies or changed conditions and to a formalism and ritualism in the manner by which work is performed. If the bureaucrat is successfully socialized by the organization, he actually has a trained incapacity to give service.

Merton may be criticized for having looked primarily at the officially-sanctioned means of organizational goal accomplishment, but the empirical case studies of bureaucracy have produced so mixed a set of findings that both Merton and his critics receive some empirical support. The available evidence on adaptation suggests, however, that bureaucratic success is more closely associated with innovative than with ritualistic or conformist behaviour. In a subsequent article, Merton himself describes a variety of adaptations to bureaucracy, varied on the axes of the acceptance of organizational goals and the efficiency of organizational means (1957).

Breed (1956), in a study of newspapermen, attempts to explain why they so readily adapt to publishers' editorial policies which are so

uncongenial to their own. His data indicate that adaptation to an unshared point of view does not induce a change in the newspaperman's ideological stance. The adaptation is brought about by a set of procedures which subtly redefine policy issues into questions of newsworthiness, by the esteem reporters have for their superiors, by their mobility aspirations and the desire to please their superiors, and by the compensating symbolic rewards which newspapermen enjoy. The adaptation, though effective, appears nonetheless to be only skin-deep.

Fred Goldner (1965) discusses the rather widespread contingency of demotion in large bureaucratic settings. The workers who anticipate such a possibility - and from 59 to 64 per cent of the sample did - often protect themselves from undue stress by making a prior adaptation. Rather than await demotion with their mobility aspirations still in full sail, they begin to manifest defensive rationalizations about the disadvantages of high rank, to deflect their means of self-expression from work to family areas, and to develop alternative goal systems in consumption and leisure. Goldner points out, however, that too much success in prior adaptation may have some elements of the self-fulfilling prophecy, ensuring the outcome which the prior adaptation sought to accomodate.

CONCLUDING NOTE

It should be pointed out that the available literature is so extensive that, notwithstanding the length of this paper, more has been left out than included. Despite the many omissions in the theoretical and empirical literature, we are hopeful that the major themes have been identified, discussed, and evaluated. It is nonetheless important that the material can one day be integrated and synthesized into a set of multidimensional propositions which would lead us to the complex interplay of a variety of causal factors.

It is the current lack of such a synthesis - linking the separate contributions of each of the major causes of variation - which prompts us to recommend caution in accepting unidimensional approaches to such complex phenomena as work behaviour, work satisfaction, aspirations, attitudes toward work and so on. A true theory of work behaviour and work attitudes would have, of necessity, to deal with many variables and the interaction effects between them. Although this has not been the task of this literature review, it is our hope that the ground has been somewhat cleared through the identification of what seems to us to be five separate lines of reasoning in accounting for the same phenomena. Clearly, our division of the field is more suggestive than definitive, but a beginning has been made.

Industrial Relations Centre
McGill University
Montreal

Joseph C. Ryant

BIBLIOGRAPHY

Note: We cite here only the primary sources used in this review. Readers are referred to these sources for additional material.

1. Abegglen, James. The Japanese Factory. Glencoe, Ill.: The Free Press, 1958.

2. Anderson, Theodore and Warkov, Seymour. "Organizational size and functional complexity." ASR 26, 1961, pp.23-28.

3. Argyris, Chris. Personality and Organization. New York: Harper, 1957.

4. Barnard, Chester. The Function of the Executive. Cambridge, Mass.: Harvard University Press, 1938.

5. Bar-Yosef, R. and Schild, E.O. "Pressure and defences in bureaucratic roles." AJS LXXI, 1966, pp.665-673.

6. Becker, Howard and Strauss, Anselm. "Careers, personality and adult socialization." AJS LXII, 1956, pp.253-263.

7. Becker, Howard and Geer, Blanche. "The fate of idealism in medical school." ASR 23, 1958, pp.50-56.

8. Becker, Howard et al. Boys in White. Chicago: University of Chicago Press, 1961.

9. Bell, Daniel. The End of Idology. rev. ed. New York: The Free Press, 1962.

10. _____. "Work and its discontents" in Bell, 1962.

11. Bell, Gerald, ed. Organizations and Behaviour. Englewood Cliffs, N.J.: Prentice-Hall, 1967.

12. Bidwell, Charles. "The administrative role and satisfaction in teaching." J. Educ. Soc. 1955, 29, pp.41-47.

13. Blau, Peter. The Dynamics of Bureaucracy. Chicago: University of Chicago Press, 1955.

14. _____. Exchange and Power in Social Life. New York: Wiley, 1964.

15. Blau, Peter and Scott, W. Richard. Formal Organizations. San Francisco: Chandler, 1962.

16. Blauner, Robert. "Work satisfaction and industrial trends in modern society" in Simpson and Simpson, 1964, pp.282-292.

17. _____. Alienation and Freedom. Chicago: University of Chicago Press, 1964.

18. Blishen, et al. Canadian Society. rev. ed. Toronto: MacMillan of Canada, 1965.

19. Brazeau, Jacques. "The practice of medicine in Montreal" in Blishen et al., 1965, pp.203-218.

20. Breed, Warren. "Social control in the newsroom: A functional analysis." SF 33, 1955, pp.326-335.

21. Brim, Orville and Wheeler, Stanton. Socialization After Childhood: Two Essays. New York: Wiley, 1966.

22. Bucher, Rue and Strauss, Anselm. "Professions in process." AJS 66, 1961, pp.325-334.

23. Caplow, Theodore. The Sociology of Work. Minneapolis: University of Minnesota Press, 1954.

24. Carlin, Jerome. Lawyers on Their Own. New Brunswick, N.J.: Rutgers University Press, 1962.

25. Chinoy, Eli. Automobile Workers and the American Dream. Garden City, N.Y.: Doubleday, 1955.

26. Coleman, James. The Adolescent Society. New York: The Free Press, 1961.

27. Crozier, Michel. The Bureaucratic Phenomenon. Chicago: Univ. of Chicago Press, 1964.

28. Dalton, Melville. "Informal factors in career achievements." AJS 56, 1951, pp.407-415.

29. _____. Men Who Manage. New York: Wiley, 1959.

30. Day, Robert C. and Hamblin, Robert. "Some effects of close and punitive supervision" in Bell, ed. 1967.

31. Dornbusch, Sanford. "The military academy as an assimilating institution." SF 33, 1955, pp.316-321.

32. Dubin, Robert. The World of Work. Englewood Cliffs, N.J.: Prentice Hall, 1958.

33. Etzioni, Amitai. A Comparative Analysis of Complex Organizations. New York: The Free Press, 1961.

34. _____. "Dual leadership in complex organizations." ASR 30, 1965, pp.688-698.

35. Faris, Robert E.L., ed. Handbook of Modern Sociology. Chicago: Rand-McNally, 1964.

36. Faunce, Willian A. "Automation in the automobile industry: Some consequences for in-plant social structure." ASR 23, 1958, pp.401-407.

37. Faunce, William A. and Clelland, Donald A. "Professionalization and stratification patterns in an industrial community." AJS 72, 1967, pp.341-350.

38. Foote, Nelson H. "The professionalization of labour in Detroit." AJS 53, 1953, pp.371-380.

39. Freidson, Elliot. "Client control and medical practice." AJS LXV, 1960, pp.374-382.

40. Getzels, J.W. and Guba, E.G. "The structure of roles and role conflict in the teaching situation." J. Educ. Soc. 29, 1955, pp.30-40.

41. Goffman, Erving. Asylums. Chicago: Aldine Publishing Co., 1962.

42. Goldner, Fred H. "Demotion in industrial management." ASR 30, 1965, pp.714-724.

43. Goode, William. "Community within a community: The professions." ASR 22, 1957, pp.194-200.

44. _____. "Professions and 'non-professions'" in Vollmer and Mills, eds. 1966.

45. _____. "The protection of the inept." ASR 32, 1967, pp. 5-19.

46. Gordon, Wayne C. "The role of the teacher in the social structure of the high school." J. Educ. Soc. 29, 1955, pp.21-29.

47. Gouldner, Alvin W. Patterns of Industrial Bureaucracy. Glencoe, Ill.: The Free Press, 1954.

48. _____. "Cosmopolitans and locals: Toward an analysis of latent social roles." Parts I and II. ASQ 1957-58, pp.281-306, 441-480.

49. _____. "The norm of reciprocity: A preliminary statement." ASR 25, 1960, pp.161-178.

50. Gross, Edward. "Industrial relations" in Faris, ed.,1964.

51. _____. Industry and Social Life. Dubuque, Iowa: Wm. C. Brown Co., 1965.

52. Gross, Neil et al. Explorations in Role Analysis. New York: Wiley, 1958.

53. Halsey, A.H., Floud, Jean and Anderson, C.A., eds. Education, Economy and Society. New York: The Free Press, 1961.

54. Haire, Mason, ed. Modern Organization Theory. New York: Wiley, 1959.

55. _____. "Biological models and empirical histories of the growth of organizations" in Haire, ed. 1959, pp.272-306.

56. Hall, Oswald. "The informal organization of the medical profession." CJEPS 1946, pp.30-44.

57. _____. "The stages of a professional career" in Vollmer and Mills, eds. 1966, pp.88-97.

58. Hall, Richard and Tittle, Charles R. "A note on bureaucracy and its 'correlates'." AJS 72, 1966, pp.266-272.

59. Hart, C.W.M. "Industrial relations,research and social theory." CJEPS 15, 1949, pp.53-73.

60. Herberle, Rudolph. "Social consequences of the industrialization of southern cities." SF 27, 1948, pp.29-37.

61. Homans,George. The Human Group. New York: Harcourt, Brace, 1950.

_____. Social Behaviour: Its Elementary Forms. New York: Harcourt, Brace, 1961.

62. Hoos, Ida R. "When the computer takes over the office" in Nosow and Form, eds. 1962, pp.72-82 (abridged).

63. Hopkins, T.K. The Exercise of Influence in Small Groups. Totowa, N.J.: Bedminster, 1965.

64. Hughes, Everett C. "Institutional office and the person." AJS XLIII, 1937, pp.404-413.

65. Hughes, Everett C. and Hughes, Helen M. Where Peoples Meet: Racial and Ethnic Frontiers. Glencoe, Ill.: The Free Press, 1952.

66. Hughes, Everett C. "The making of a physician: General statement of ideas and problems." Human Org.14, 1956, pp.21-25.

67. _____. Men and Their Work. Glencoe, Ill.: The Free Press, 1958.

68. _____. "The professions in society." CJEPS 26, 1960, pp.54-61.

69. Inkeles, Alex. "Industrial man: The relation of status to experience, perception, and values." AJS LXVI, 1960, pp.1-31.

70. Inkeles, Alex and Bauer, Raymond. The Soviet Citizen. Cambridge, Mass.: Howard University Press, 1961.

71. Janowitz, Morris. The Professional Soldier. Glencoe, Ill.: The Free Press, 1960.

72. Kahl, Joseph. "Educational and occupational aspirations of 'common man' boys." Harvard Educ. Review 23, 1953, pp.186-203.

73. Katz, Daniel et al. Productivity, Supervision and Morale Among Railroad Workers. Survey Research Centre, University of Michigan, 1951.

74. Katz, Daniel and Kahn, R.L. "Some recent findings in human relations research in industry" in Swanson, Newcomb and Hartley, eds. Readings in Social Psychology. New York: Holt, Rinehart and Winston, 1952.

75. _____. "Leadership practices in relation to productivity and morale" in Cartwright and Zander, eds. Group Dynamics, Evanston: Row, Peterson and Co., 1960.

76. Kerr, Clark and Siegel, Abraham. "The inter-industry propensity to strike - An international comparison"in Kornhauser et al., eds. Industrial Conflict. New York: McGraw-Hill, 1954, pp.189-212.

77. Kornhauser, William. "The Negro union official: A study of sponsorship and control." AJS LVII, 1952, pp.443-452.

78. _____. "The interdependence of professions and organizations" in Vollmer and Mills, eds. 1964, pp.292-293.

79. Kriesberg, Louis. "Occupational controls among steel distributors" in Simpson and Simpson, eds. 1964, pp.274-281.

80. Landes, David. "French business and the businessman: A social and cultural analysis" in Meade, ed. 1951, pp.334-353.

81. Lewis, Roy and Maude. Professional People. London: Pheonix House Ltd., 1952.

82. Lipset, Seymour M. et al. Union Democracy. Glencoe, Ill.: The Free Press, 1963.

83. Loeb, Martin B. "Role definitions in the social world of the psychiatric hospital" in Greenblatt, Williams and Levinson, eds. The Patient and the Mental Hospital. Glencoe, Ill.: The Free Press, 1957, pp.14-19.

84. Lortie, Dan. C. "Professional socialization" in Vollmer and Mills, eds. 1966.

85. MacIver, Robert. "Professional groups and cultural norms" in Vollmer and Mills, eds. 1966.

86. Mack, Raymond W. "Ecological patterns in an industrial shop." SF 1954, pp.351-356.

87. March, James and Simon, Herbert. Organizations. New York: Wiley, 1958.

88. March, James, ed. Handbook of Organizations. Chicago: Rand-McNally, 1965.

89. Meade, Earle E. Modern France. Princeton, N.J.: Princeton University Press, 1951.

90. Merton, Robert K. Social Theory and Social Structure. rev. ed. Glencoe, Ill.: The Free Press, 1957.

91. _____. "Bureaucratic structure and personality" in Nosow and Form, eds. 1962, pp.457-459 (abridged).

92. Morse, Nancy. Satisfaction in the White Collar Job. Survey Research Centre, University of Michigan, 1953.

93. Morse, Nancy and Reimer, Everett. "The experimental change of a major organizational variable." Journal of Abnormal and Social Psychology 1956, pp.120-129.

94. Morse, Nancy and Weiss, R.S. "The function and meaning of work and the job" in Nosow and Form, eds. 1962, pp.29-35 (abridged).

95. Mullen, James H. Personality and Productivity. New York: Columbia University Press, 1966.

96. Naegele, Kaspar. "Clergymen, teachers, and psychiatrists: A study in roles and socialization." CJEPS 22, 1956, pp.46-62.

97. Nosow, Sigmund and Form, William, eds. Man, Work and Society. New York: Basic Books, 1962.

98. Parsons, Talcott. The Social System. Glencoe, Ill.: The Free Press, 1951.

99. Parsons, Talcott and Smelser, Neil. Economy and Society. Glencoe, Ill.: The Free Press, 1956.

100. Pearlin, Leonard I. and Kohn, Melvin. "Social class, occupation and parental values: A cross-national study." ASR 31, 1966, pp.466-479.

101. Perrow, Charles. "A framework for the comparative analysis of organizations." ASR 32, 1967, pp.195-208.

102. Reissman, Leonard. "A study of role conceptions in bureaucracy." SF 27, 1949, pp.305-310.

103. Riesman, David et al. The Lonely Crowd. New Haven: Yale University Press, 1950.

104. Roe, Anne. The Making of a Scientist. New York: Dodd, 1953.

105. Roethlisberger, Fritz, and Dickson, William. Management and the Worker. Cambridge, Mass.: Howard University Press, 1939.

106. Rosenberg, Morris. Occupations and Values. Glencoe, Ill.: The Free Press, 1957.

107. Roy, Donald I. "Quota restriction and goldbricking in a machine shop." AJS 47, 1952, pp.427-442.

108. _____, "Work satisfaction and social reward in quota achievement: An analysis of piecework incentives." ASR 18, 1953, pp.507-514.

109. _____. "Efficiency and 'the fix': Informal intergroup relations in a piecework machine shop." AJS 60, 1954, pp.255-266.

110. Rushing, William A. The Psychiatric Hospital. Chapel Hill: University of North Carolina Press, 1964.

111. Ryant, Joseph C. Parental Perceptions of the School and Work Plans of Adolescent Boys. Unpublished M.A. Thesis, McGill University, 1965.

112. _____. Critique of Hopkins: The Exercise of Influence in Small Groups. Unpublished, Jan. 1966.

113. _____. Prisons and Reformatories as People-Processing Organizations. Industrial Relations Centre, McGill University, 1967, mimeo.

114. Sayles, Leonard. Behaviour of Industrial Work Groups. New York: Wiley, 1958.

115. Scott, W. Richard. "Professionals in bureaucracies - Areas of conflict" in Vollmer and Mills, eds. 1966, pp. 265-275.

116. Seashore, Stanley E. Group Cohesiveness in the Industrial Work Group. Ann Arbor: Institute for Social Research, University of Mich., 1949.

117. Selznick, Phillip. TVA and the Grass Roots. Berkeley and Los Angeles: University of California Press, 1949.

118. _____. "Decision-making in an administrative organization." Public Admin. Review Vol. IV, 1944, pp.16-30.

119. Simon, Herbert. "Some further requirements of bureaucratic theory" in Merton, et al.,eds. Reader in Bureaucracy. Glencoe: The Free Press, 1952.

120. _____. Administrative Behaviour. 2nd. ed. New York: MacMillan, 1957.

121. Simpson, Richard and Simpson, Ida, eds. Social Organization and Behaviour. New York: Wiley, 1964.

122. Slocum, Walter L. Occupational Careers. Chicago: Aldine, 1966.

123. Smigel, Erwin. The Wall Street Lawyer. New York: The Free Press, 1964.

124. Smith, Harvey, and Levinson, Daniel. "The major aims and organizational characteristics of mental hospitals" in Greenblatt, Levinson, and Williams, 1957, pp.3-8.

125. Stinchecombe, Arthur L. "Bureaucratic and craft administration of production: A comparative study." Admin. Science Quarterly Vol. 4, 1959, pp.168-187.

126. _____. "Social structure and organizations" in March,ed. 1965.

127. Stone, Robert C. "Factory organization and vertical mobility." ASR 18, 1953, pp.28-35.

128. Stotland, Ezra, and Koblen, Arthur. Life and Death of a Mental Hospital. Seattle: University of Washington Press, 1965.

129. Strauss, Anselm, and Rainwater, Lee. The Professional Scientist. Chicago: Aldine, 1962.

130. Strauss, Anselm et al. Psychiatric Ideologies and Institutions. New York: The Free Press, 1964.

131. Terrien, Frederick W. "The occupational roles of teachers." J. Educ. Soc. 29, 1955, pp.14-20.

132. Terrien, Frederick W., and Mills, Donald L. "The effect of changing size upon the internal structure of organizations." ASR 20, 1955, pp.11-13.

133. Thompson, James D., and McEwen, William J. "Organizational goals and environment: Goal setting as interaction process." ASR 23, 1956, pp.23-31.

134. Vollmer, Howard, and Mills, Donald. Professionalization. Englewood Cliffs, N.J.: Prentice Hall, 1966.

135. Vollmer, Howard. "Professional adaptation to organizations" in Vollmer and Mills, eds. 1966, pp.276-282.

136. Vollmer, Howard, and Mills, Donald. "Professionalization and technological change" in Vollmer and Mills, eds. 1966, pp.22-28.

137. Walker, Charles, and Guest, Robert. The Man on the Assembly Line. Cambridge, Mass.: Howard University Press, 1952.

138. Warner, W. Lloyd, and Abegglen, James. Big Business Leaders in America. New York: Harper, 1955.

139. Weber, Max. From Max Weber, ed. by Gerth and Mills. New York: Oxford University Press, 1958.

140. Weil, Simone. The Need for Roots. Boston: The Beacon Press, 1952.

141. _____. "Factory work." in Nosow and Form, eds. 1962, pp.452-457 (abridged).

142. Westley, William A. "Violence and the police." AJS LIX. 1953, pp.34-41.

143. Westley, William A., and Elkin, Frederick. "The protective environment and socialization." SF 1957. pp.243-250.

144. White, R., and Lippit, R. "Leader behaviour and member reaction in three 'social climates'" in D. Cartwright and A. Zander, eds. Group Dynamics, 2nd. ed. Evanston: Row, Peterson, 1960.

145. Whyte, William F. Human Relations in The Restaurant Industry. New York: McGraw-Hill, 1948.

146. _____. Street Corner Society. rev. ed. Chicago: University of Chicago Press, 1955.

147. Whyte, William H. The Organization Man. New York: Simon and Shuster, 1956.

148. Wilensky, Harold. Intellectuals in Labour Unions. Glencoe, Ill.: The Free Press, 1956.

149. Wilensky, Harold, and Edwards, Hugh. "The skidder: Ideological adjustments of downward mobile workers." ASR 24, 1959, pp.215-231.

150. Woodward, Joan. Management and Technology. London: H.S.M.O., 1958.